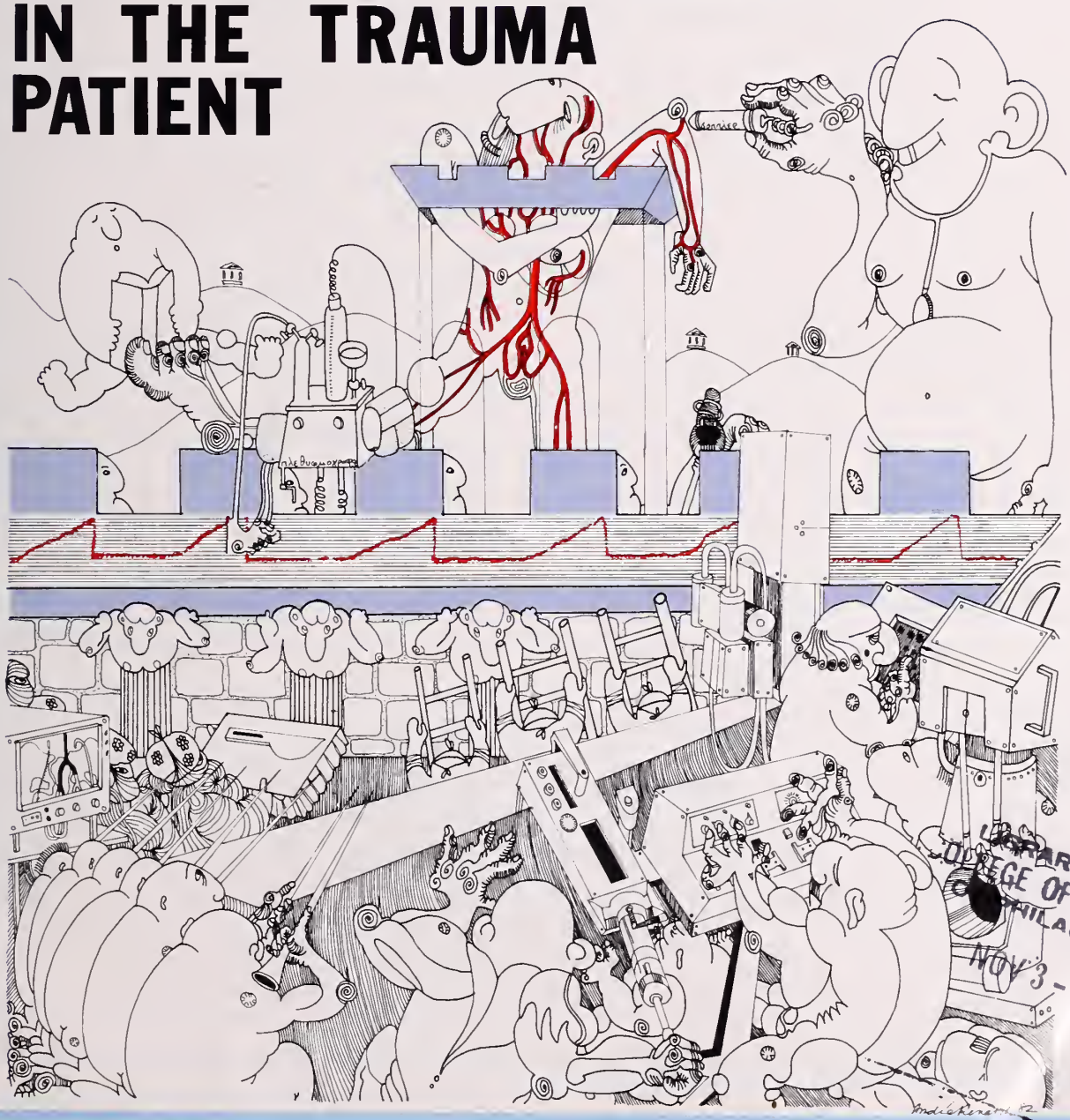
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COVER

This month's cover of *The Journal* was designed by Andre Renard, M.D., a Plastic Surgeon practicing in Jacksonville. The cover depicts the lead article "Noninvasive Vascular Diagnostic Studies in the Trauma Patient" by William M. Blackshear, M.D. of Tampa, which begins on page 29.

Dr. Renard shows a group of aggressive physicians and their equipment anxious to utilize invasive techniques on the patient suffering from arterial injury. The patient is far removed in his protective "tower" where another team of physicians choose to rely on noninvasive techniques in their diagnosis.

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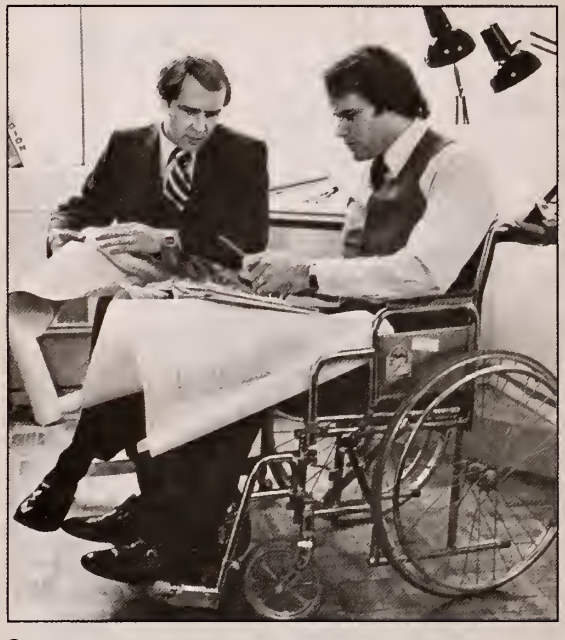
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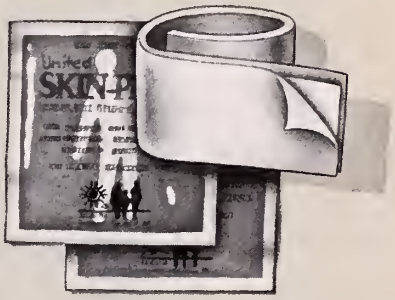
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PRESIDENT'S PAGE

The communication gap



Much of the misunderstanding that exists at all levels of society is a result of what is commonly called, "The Communication Gap". Somewhere along the line either an individual does not receive the information being conveyed or those conveying the information articulate it in such a way that it never gets to the intended recipient. Whatever the cause, this communication gap is a major factor in misunderstanding among people in general as well as a key factor in the unrest that sometimes occurs among the members of organizations such as our own FMA.

Over the years, as I have participated in various positions in organized medicine and in the community, I have observed with regret that a primary reason for the communication gap exists with the intended recipient—the member. In most organizations with which I am familiar the leadership makes every effort to serve the best interest of its members by communicating through multiple mechanisms the ongoing activities of the organization as well as the problem that adversely affect the purposes of the organization However, for various reasons, the member either does not read the material or, perhaps, makes only a cursory review and discards it from memory. It is little wonder that many organizations experience unrest in times of crisis involving highly complex issues. Such is the situation regarding the professional liability problem and other issues that effect the way we practice medicine.

Recently a vivid example of the communication gap appeared in correspondence directed to me as President of the FMA from an officer of one of the Association's component county medical societies. I would like to share with you the essence of that letter and my response because I think it is a significant part of the problem of communications that can directly affect how the integrity, strength and representation ability of the FMA is perceived by the members.

The correspondence I received was an expression of concern that the rise of splinter groups of physicians in Florida, particularly in South Florida, represents a grass roots expression of unhappiness about both perceived and real deficiencies of the FMA. As an example, he referred to the issues addressed by the FMA House of Delegates at its meeting last May indicating that there was very little that really dealt with the problems of physicians such as Medicare, relations with the Department of Professional Regulation, Workers' Compensation, HMO's, the Federal Trade Commission and other legislative issues affecting the practice of medicine. He asserted that the meeting addressed itself to the problems of 20 years ago and not the problems of today. Further, he went on to say that while the FMA has responded in some of these areas, or at least says that it does, that this is not well communicated to the membership.

I would like to share with you the following excerpts from my response to this correspondence and would hasten to add that I perceived that letter to be one expressing well intentioned, positive concern regarding the many complex problems that physicians in our State as well as throughout the country face. I further conveyed the FMA's sincere desire to work together in resolving these problems.

Dear . . .

"You expressed in your letter the concern that FMA was not addressing those issues facing medicine today. You specifically mentioned problems with Medicare, the Department of Professional Regulation, Workers' Compensation, HMO's and the Federal Trade Commission. You also expressed concern that at the 1982 Annual Meeting the House of Delegates addressed itself to the problems of 20 years ago and not those that are currently with us. I think that FMA Past President Dr. Mullen's letter to you of April 20, 1982 expressed as well as can be done the frustrating reality of your observation about issues and that is, yes, in many cases, '. . . the issues are the same; the players are different and they manifest themselves in different costumes, but the basic ideologies which threaten our health care system have been, are currently, and will continue to remain the same into the foreseeable future.' I have attached for your information a summary of the issues addressed by the House of Delegates in 1962 and also by the House in 1982. I think this is a harsh reminder that many of our past problems are still with us. I would also ask that you review the Association's Priorities and our efforts to accomplish these within the past few years. Enclosed is a copy of the Priorities for 1982-83 and I think you will find that the very items referred to in your letter, particularly relating to the issues of professional liability, alternate systems of health care delivery, Workers' Compensation,

physician-hospital relations, the Federal Trade Commission and many, many others, have been addressed in the past and continue to be with us today.

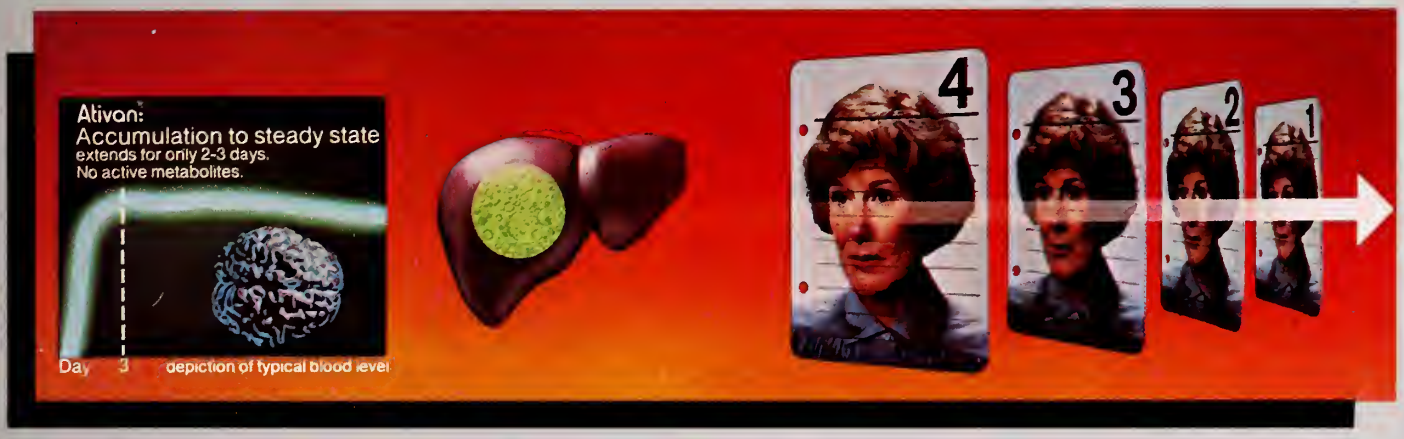
I recognize that we must continually seek better ways to effectively represent the view of the membership. One of the things that has always impressed me since my involvement in organized medicine has been the unselfish dedication of the leadership in carrying out their responsibilities to the best interest of their colleagues and the public. We recognize that we must try even harder if we are to alleviate the concerns such as those expressed not only in your letter but those which have been expressed by others. We all know too well that unless the profession of medicine is united there is no hope for resolving common problems which are, in fact, universal."

It is my sincere hope that this example of the communication gap which can have such an important impact on the overall effectiveness and unified strength of our organization will call to mind the importance of every member of the FMA taking the time to become accurately informed about what is being done on his/her behalf by the FMA. I would also add my personal commitment that the FMA will continue to make every effort to improve and enhance communications and cooperation relating to programs and activities of the FMA with the membership directly and through respective county medical societies and FMA-recognized specialty groups.



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1. Klotz U, Reimann I: N Engl J Med *302*:1012-1014, 1980.
2. Desmond PV, Patwardhan RV, Schenker S, et al: Ann Intern Med *93*:266-268, 1980.
3. Patwardhan RV, Yarborough GW, Desmond PV, et al: Gastroenterology *79*:912-916, 1980.
4. Sellers EM, Naranjo CA, Peachey JE: N Engl J Med *305*:1255-1262, 1981.
5. Ruffalo RL, Thompson JF, Segal JL: South Med J *74*:1075-1078, 1981.

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Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals (e.g., drug addicts and alcoholics) should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown, but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia, some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

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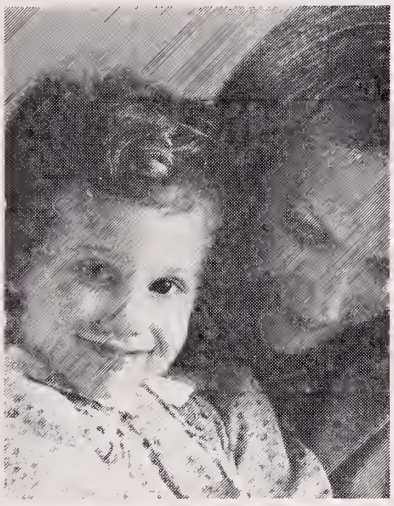
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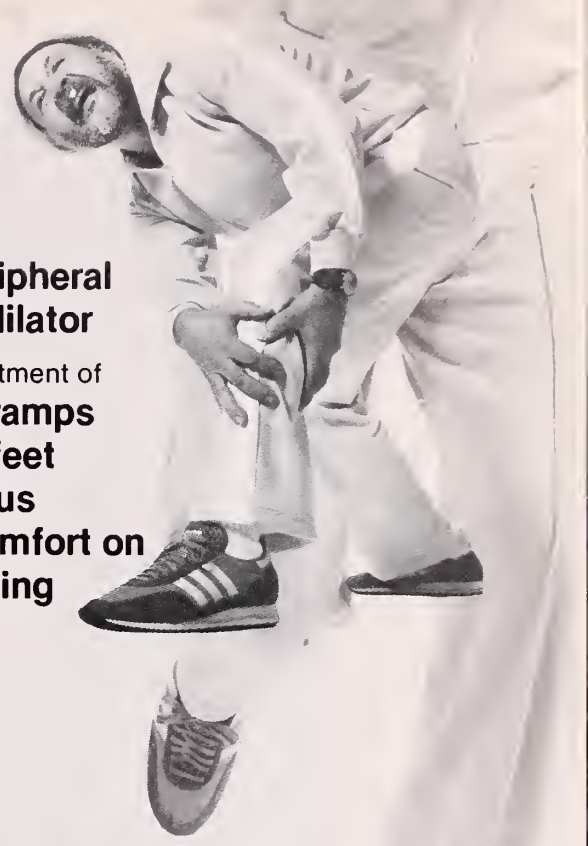
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1. Gordon, E.E. and Haas, A., Indust. Med. & Surg. 28:217, 1959. (See cases 2, 10, 15, 18, 35, 36 in Table I; cases 20 and 31 in Table II).

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God, my Father, as I grow older, endow me with courage born of loyalty to all that is noble and worthy, scorning to compromise with vice or injustice. And keep me from fear when truth and right are in jeopardy. Let me begin the New Year by discarding prejudices but not old truths, by discarding anger and bitter feelings but not kindness, by disdaining new associations made from mercenary motives but not old friends. Grant me new ties of true friendship and new opportunities of service. Provide me with a sense of wonder so indestructible that it will last throughout the year. Keep me alive every day, not to appetites and pleasures, pride or money-making, but to goodness, purity, love, music, flowers, stars, God and eternal hope. In the approaching 8,760 hours of 1983, let me daily give the best that is in me during those hours set aside for working so that the hours allocated for pleasure and recreation may be enjoyed with friends, and in the hours set aside for sleeping, I may sleep well. As true satisfaction in life comes not from accumulating money or material things but from the realization of a job well done, depicting the difference between a journeyman and a real craftsman, remind me that the difference is not entirely upon what I do but rather upon the meaning and purpose of my acts.

In the New Year, keep me from procrastination, as it is human, and rather than dreaming of some imagined rose garden over the horizon, let me enjoy the roses blooming outside my window each day and so, take some time from making a living to make life worthwhile.

While the circumstances among which one lives determines one's reputation, the truths one believes in, determines one's character and the workshop of character is everyday life. To build character requires a seeing eye, a feeling heart, a helping hand, and the ability to act justly, love mercy and walk humbly, to laugh often yet not forgetting how to weep, and to be able to reach into the future, yet never forgetting the past so as to see the eternal values above the material. While reputation is what men will write on one's tombstone, character is what angels say about one before the throne of God.

Life is an adventure of faith, and to live well I must have a faith fit to live by, a self fit to live with and work fit to live for. So in the new year may I have health, energy, inspiration and a renewed faith in my own ability to take the raw stuff of life and make it a thing of beauty.

C.M.C.

Telephone courtesy

A friend of mine maintains that for every human strength there is a compensatory human weakness. This principle seems to be equally applicable to inanimate objects, especially certain modern inventions that have supposedly improved our quality of life. The telephone is a prime example.

The telephone has been a remarkable boon to communication since the first time that Mr. Bell spoke into it. However, despite its good qualities, ever since the invention of the telephone, it has been a giant thorn in the side of many a busy person. One such victim of the telephone, Dr. Reese Alsop of Huntington, N.Y., expressed his frustration in a poem that appeared in the November 4, 1982 issue of *The New England Journal of Medicine.*

"Query"

When my secretary tells me
there's a doctor on the phone
I disregard my patient and assume
a pleasant tone,
But when the only answer, the only
anodyne,
Consists of being told to "hold
for doctor on the line,"
I wonder as I stand there, a wasting
of my time,
Just why he feels his moments count
for so much more than mine.

Dr. Alsop is not the first Bell customer who has seethed at being told to "hold for doctor on the line." H.L. Mencken addressed this problem back in 1927 when he realized that the telephone enables anyone to interrupt a busy person's work, line of concentration or quiet dinner hour. And this was in the days before Ma Bell was urging everyone to "reach out and touch someone."

Mencken observed that over-worked businessmen had begun channeling their telephone calls through their secretaries. "One hears that one is wanted by Mr. Blank, and then one discovers that one is talking to his secretary. While she goes to fetch him, one waits." Frequently, the connection is broken during the waiting interval and the call has to be attempted again. His assessment of this dilemma? "Time consumed: twelve minutes. Penalty for the attendant swearing: 10,000 years in hell."

The sage of Baltimore offered some tongue-in-cheek solutions to the frustrations precipitated by the telephone. He proposed, for example, a national secret organization whose members would swear to avoid telephone calls when possible and to avoid people who make unnecessary calls. However, the courtly gentleman from Baltimore felt that the best answer lay in the realm of good manners. He believed that he was just as busy as the people he called. However, he, not a secreatry, initiated the telephone calls to his friends and associates. This practice, according to Mencken, seemed to be the polite thing to do.

In this day and age of impersonal technology, Mencken's concept of "the polite thing to do" might be as welcome as the proverbial breath of fresh air. However, the person who decides to incorporate this little habit of good manners into his everyday routine should be prepared for the shock that it will precipitate. Mencken discovered that when he made his own telephone calls to an acquaintance, "I find him surprised into temporary speechlessness by the fact that I am talking to him myself. He expects a preliminary parley with a secretary. He is prepared to give his full name and address, and to answer various other questions. When I bust (sic) in upon him at once he is somehow shocked." Some forty years later, President Lyndon Johnson, a perennial and effective user of the telephone, frequently placed his own calls and directly answered his own phone. It was reported that he did this because it was the only way he could determine for himself what was going on around the White House.

An informal poll reveals that many physicians are afflicted with Dr. Alsop's frustration. Perhaps, treating his affliction in the manner that Mencken prescribes would be helpful. The physician who dials one of his professional associates himself during office hours would save much time — his own, his secretary's and his fellow physicians'. Frustration levels would be lower. Also, in the life of a busy person, the telephone might henceforth be regarded as a respectable instrument of communication and not as an inconsiderate intruder.

F.N.V.



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1. National Interagency Council on Smoking and Health. *The Smoking Digest.* Progress Report on a Nation Kicking the Habit. 1977.

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Usage in Pregnancy: Safe use in pregnancy has not been established; do not use in pregnant women unless the potential benefits outweigh the possible hazards.
Precautions: Use with caution in patients with severe cardiac disease, hypertension, hyperthyroidism, acute myocardial injury, congestive heart failure, or peptic ulcer. Chronic high dosage is usually associated with gastrointestinal irritation.
Adverse Reactions:
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Respiratory—tachypnea, respiratory arrest.
Renal—albuminuria, increased excretion of renal tubule and red blood cells.
Others—fever, dehydration.
Overdosage:
Symptoms—In infants and small children, agitation, headache, hyperreflexia, fasciculations, and clonic and tonic convulsions. In adults, nervousness, nausea, vomiting, tachycardia, and extrasystoles.
Therapy—No specific treatment. Discontinue drug immediately. Provide supportive treatment as indicated. Ipecac syrup for oral ingestion. Avoid sympathomimetics. Sedatives such as short-acting barbiturates help control CNS stimulation. Restore the acid-base balance with lactate or bicarbonate.
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JANUARY 1983 Vol. 70, No. 1

Noninvasive vascular diagnostic studies in the trauma patient

William M. Blackshear Jr., M.D.

ABSTRACT: A review is presented of the applications of noninvasive vascular diagnostic studies including Doppler ultrasound, strain gauge plethysmography, impedance plethysmography, and pulse volume recording in trauma patients. These techniques can provide useful diagnostic information about the presence and location of arterial injuries and the adequacy of a vascular repair. They can also be useful in the identification of patients at high risk for the development of complications of radial or ulnar artery catheterization and in the serial evaluation of high risk patients for acute deep venous thrombosis. Circumstances in which it is not proper to rely upon the information obtained from noninvasive studies are also reviewed. These techniques are easily mastered by the practicing trauma surgeon and can find wide applicability in his practice.

The Author
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In recent years noninvasive physiologic studies for detection of and quantitation of acute and chronic diseases of the arterial and venous systems have become commonplace. Techniques based on Doppler and other forms of ultrasound and plethysmography obtain diagnostic information relative to flow and pressure in the vascular system. Many of these techniques require a sophisticated peripheral vascular laboratory with highly trained personnel in order to achieve acceptable diagnostic accuracy. The basic techniques of continuous wave Doppler examination and plethysmography can, however, be easily mastered by the practicing physician and can find broad application in his practice.

Although noninvasive studies have not been widely used in the trauma patient, there are many areas in patient evaluation and management in which the data obtained from these studies can be of considerable importance. In this review the application of these techniques will be discussed in three broad areas: (1) the diagnosis of arterial injuries, (2) evaluation of a vascular repair, and (3) prevention and diagnosis of complications in trauma.

With few exceptions all techniques described herein can be performed by the physician with a minimum of practice. The equipment required for these studies is relatively inexpensive and can be used at the bedside, whether in the emergency department, operating room, recovery room, intensive care unit, or hospital ward.

Diagnosis of arterial injuries ● The earliest application of noninvasive physiologic studies was in the detection of alterations of pressure and flow within the arterial system. Doppler ultrasound is perhaps the most familiar method for examination of the

peripheral arterial tree, although other techniques such as pulse volume recording* and plethysmography which measure volume changes in a limb or digit can also be utilized.

In brief, the continuous wave Doppler utilizes a piezoelectric crystal which emits a high frequency beam of ultrasound when stimulated by a weak electric current. As this beam travels through tissue, shifts above or below the baseline frequency are produced whenever the beam strikes a moving object such as red blood cells. The magnitude and direction of the shift is proportional to the red cell velocity and its direction of movement. These shifted frequencies are then detected by a similar piezoelectric receiving crystal and translated into an audible signal. The Doppler thus provides accurate information about the characteristics of arterial and venous blood flow velocity. Several models of hand-held pocket Dopplers are available which are inexpensive, simple to use, and of high quality.

Doppler auscultation over an artery distal to an occluding blood pressure cuff can identify the point at which flow in the artery resumes as the cuff is slowly deflated. This point corresponds to systolic blood pressure. It is important to recognize that the site of blood pressure measurement is at the location of the occluding cuff, not at the site of auscultation, which may be over any patent artery distal to the cuff.

A Doppler flow velocity wave form can also be recorded on a strip chart recorder using a frequency to voltage convertor and a zero crossing detector. A normal Doppler velocity wave form is triphasic with a large systolic forward flow component, a brief reversal of flow in early diastole, and a small forward component in mid-diastole. There is usually no or minimal flow in late diastole. With obstruction of a hemodynamically significant degree proximal to the site of recording, alterations in this wave form occur. When the obstruction is of a moderate degree the reverse flow component will be lost producing a monophasic systolic forward wave. There will be no flow in diastole. This monophasic wave form with flow in diastole to zero implies obstruction of a degree which usually will not impair resting tissue nutrition.

With severe obstruction proximally flow is continuous above the baseline throughout the cardiac cycle with only small systolic forward components noted. This monophasic pattern above zero is suggestive of severe proximal obstruction which may impair tissue nutrition. With experience, all of the changes in the recorded wave form previously described can be identified by audible analysis of the Doppler signal as well.

In arterial trauma, there are four areas in which noninvasive studies are particularly useful. These are: detection of hemodynamically significant arterial lesions, assessment of priority of repair of an arterial injury, evaluation of arterial flow when physical examination is unreliable, and detection of arteriovenous fistulae.

First, the aforementioned techniques can accurately identify the presence of arterial occlusion whether it is due to direct injury or to embolization from a proximal source. In lower extremity trauma a Doppler ankle pressure in the posterior tibial and/or dorsalis pedis arteries measured with the blood pressure cuff just above the ankle should be a routine part of the physical examination. This pressure should at least be equal to the highest brachial pressure (i.e. ankle-arm index greater than or equal to 1.0).[1] If the ankle-arm index is below 1.0, it is diagnostic of obstruction in the arteries supplying the limb.

Segmental limb Doppler pressures can then be performed to localize the area of obstruction.[1] With a penetrating injury the area of obstruction will usually be clearly apparent; however, embolization may produce arterial occlusion at a location far removed from the original site of injury.

Segmental pressures are performed by placing narrow blood pressure cuffs on the limb at the upper thigh, lower thigh, and below knee levels. The upper thigh pressure should be equal to or greater than the arm pressure. A low upper thigh pressure signifies aortoiliac obstruction. The gradient between any two adjacent levels in the limb should be no more than 30 millimeters of mercury. Again, a gradient above this level is diagnostic of obstruction in the intervening arterial segment.

Although it is only qualitative, auscultation of the Doppler signal for the characteristics described earlier at the ankle and at multiple levels in the axial arterial system of the limb can also identify limbs in which arterial flow is compromised. The information obtained can then guide the surgeon and/or radiologist in operative and/or angiographic evaluation in order to minimize the likelihood of missing a significant lesion.

Second, noninvasive physiologic studies can be used to access the priority of repair of an arterial injury in a patient with multiple injuries. This problem frequently arises in combined arterial injury and long bone fracture. Arterial repair is easier and more secure when the fracture has been stabilized prior to reconstruction; however, if circulation to the limb is severely impaired distal to the injury, a delay in arterial reconstruction for treatment of orthopedic injuries may result in loss of the limb.

An ankle pressure above 50 to 60 millimeters of mercury indicates that resting arterial flow, although abnormal, will usually be adequate to

*Pulse Volume Recorder, Life Sciences, Inc., Greenwich, Connecticut.

maintain tissue viability for the time required to stabilize a fracture if systemic blood pressure remains constant. A pressure below this level indicates that the limb is in severe jeopardy and dictates immediate arterial reconstruction. Likewise, a Doppler signal at the ankle which is triphasic or monophasic to zero is usually indicative of adequate resting arterial flow. A monophasic signal with continuous flow above zero strongly suggests severe compromise of the arterial circulation and also indicates the need for immediate repair.

Many limbs with severe crush injuries or massive soft tissue damage may exhibit marked swelling. This is particularly true if the patient is seen several hours after the initial injury. Physical examination may be difficult and noninvasive studies represent the only method, short of arteriography, where accurate and reproducible data regarding the status of the peripheral arterial circulation are obtainable. Even where pedal pulses are not palpable, a normal ankle-arm index or a triphasic arterial signal at the foot will reassure the surgeon that flow in the axial arteries is not significantly compromised.

Finally, with AV fistula Doppler auscultation of the area of penetrating injury, which should be routine, can identify the classic high diastolic flow signal produced by the fistula. The information obtained can provide a qualitative estimate of the magnitude of the arteriovenous shunt and pressure studies, as previously described, can assess the adequacy of distal circulation.

It is also important to note areas where noninvasive studies can be misused in the evaluation of arterial injuries. First, these studies should never be used to rule out the presence of an arterial injury. As noted, they are useful only for the detection of hemodynamically significant alterations in arterial pressure and flow. Both with blunt and penetrating trauma, an arterial injury other than an AV fistula which does not reduce distal pressure and flow would not be detected by these methods. If undetected, it may lead to subsequent arterial occlusion, stenosis, false aneurysm formation, or other late manifestation of arterial trauma. A high index of suspicion and a recognition of the broad spectrum of arterial injuries produced by trauma should guide the surgeon toward angiography in all suspected arterial injuries.

Finally, physiologic studies are not useful for the diagnosis of a limb compartment syndrome. The pathophysiology of the compartment syndrome centers on increased tissue pressure induced by edema, hematoma, etc., which impairs capillary blood flow to the nerves and muscles within that compartment. If systolic arterial pressure within the axial arteries is above the intracompartmental pressure, flow will still occur through these axial arteries to the foot or hand, even though capillary flow within the compartment itself may virtually cease. Clearly then, a normal Doppler pressure or triphasic arterial signal at the ankle or wrist cannot be used as a guide to insure that compartmental perfusion is also maintained. Clinical signs on physical examination and direct measurement of intracompartmental tissue pressure[2] should continue to guide the clinician in the diagnosis of this insidious and potentially catastrophic condition.

Evaluation of vascular repair ● Many Doppler probes can be gas sterilized for utilization in the operating room during surgery. A sterile Doppler probe can be invaluable in localizing an artery in an area where normal tissue relationships are destroyed by massive swelling and/or injury. Shortened operative time and quicker restoration of blood flow to an ischemic limb are thus realized.

Noninvasive studies can also be used to evaluate the technical result of an operative vascular repair. After an arterial repair the Doppler probe can tell the surgeon whether arterial flow is normal distal to the repair. When the Doppler probe is passed across the area of repair, no significant increase in frequency of the Doppler signal should be detected. A marked frequency increase signifies stenosis of the anastomosis and dictates the need for operative angiography. We frequently utilize the sterile Doppler probe in these circumstances as a substitute for operative arteriography, further shortening the anesthetic time. Plethysmographic or pulse volume recordings distal to an arterial repair can also be used to confirm restoration of normal flow.

Postoperative Doppler pressures in the recovery room distal to the site of an arterial repair should be routine. With a successful repair the pressure will be restored to normal. An ankle pressure which is unchanged from preoperative suggests strongly that the arterial repair has thrombosed and dictates the need for immediate reexploration. Serial measurements of Doppler pressure for the first several days after operation should also be routine. A steadily declining Doppler pressure in the immediate postoperative period may indicate progressing thrombus formation at the site of arterial repair and also mandates reexploration or at least angiography. Technical problems are much easier to correct if detected early rather than relying on clinical signs of ischemia, which may be late.

Finally, as described below, the Doppler is also useful for the evaluation of venous flow patterns and can determine the immediate and postoperative patency of venous repairs as well.

Prevention and diagnosis of complications ● Noninvasive studies can also be useful in the prevention and early diagnosis of certain com-

plications which occur all too frequently in the trauma patient; complications related to radial and/or ulnar artery catheterization and deep venous thrombosis (DVT).

Radial and ulnar artery catheterization ● Recent years have seen a dramatic increase in the use of intra- and postoperative radial and/or ulnar catheterization for direct, continuous measurement of systolic and diastolic blood pressure. This important monitoring technique has contributed greatly to optimum patient management. In spite of its wide utility, there are certain complications of the technique which are important to recognize. These include hand and/or digital gangrene, false and/or mycotic aneurysm, AV fistula, and the late sequelae of arterial occlusion at this level such as hand claudication.

An AV fistula induced by percutaneous puncture of a peripheral artery can be easily detected by Doppler auscultation as noted earlier. Occlusion of the catheterized artery is a frequent complication of this technique. Bedford and Wollman[3] reported a 38% incidence of thrombosis in radial artery cannulations and Gardner and associates[4] a 19.3% incidence of occlusions in 536 radial artery cannulations. Three patients in the latter series required operation for their occlusion.

The dual perfusion of the hand via both the radial and ulnar arteries provides a considerable margin of safety in most patients. Loss of one of the major arteries will be asymptomatic in most cases since the other is usually capable of providing adequate flow to the hand. In approximately 8-10% of patients the anastomotic connections between radial and ulnar arteries will be inadequate and the loss of the dominant artery can be catastrophic. Severe hand claudication or gangrene of all or part of a hand can occur. This complication cannot be overlooked, as emphasized by the report of Graham et al[5] who reported several cases of hand gangrene after arterial cannulation.

A simple Allen's test which measures the adequacy of radial and ulnar perfusion is usually sufficient to identify patients with a single artery perfusing the hand. The nondominant artery can then be used for cannulation. This examination requires that the patient be alert and cooperative so that he can exercise the hand during the period of arterial compression. In the multiple injury patient, particularly those with head trauma or under anesthesia, the patient is often unable to cooperate. In this case Doppler auscultation of the palmar arch during radial and ulnar artery compression will confirm the presence of arterial flow from each vessel. Mandel and Dauchot reported on 1,000 radial artery cannulations in which the incidence of complete thrombosis was reduced to 0.2% by the use of this simple technique.[6]

Acute deep venous thrombosis ● The problem of acute deep venous thrombosis is one that continues to plague the trauma surgeon. Coon has estimated that there are over 250,000 clinically apparent cases of acute DVT in the United States per year and that up to 200,000 deaths occur per year from pulmonary embolism.[7] Many more cases occur which are not clinically apparent. Patients with major trauma are at increased risk for the development of DVT for a variety of reasons. A number of specific factors have been identified which greatly increase the incidence of deep venous thrombosis (Table 1). In addition patients with major trauma often have other general risk factors such as prolonged immobilization, advanced age, obesity, or a history of prior deep venous thrombosis.[8]

One approach to the diagnosis of acute DVT, which is clearly of paramount importance, is to venogram everyone with suspected thrombosis. While this approach will detect most cases, it is not practical for several reasons. First, venography cannot be readily performed on patients in the intensive care unit. Second, it cannot be performed repeatedly for screening purposes, particularly since some reports have suggested that the contrast medium may itself induce thrombosis.[9] Furthermore, repeated venography would clearly not be cost effective. Finally, deep venous thrombosis often develops in limbs with no apparent clinical sign of obstruction within the deep venous system which would indicate the need for venography.

For these reasons the use of noninvasive diagnostic techniques for venous evaluation has steadily increased. The most easily utilized technique for bedside testing is the venous Doppler examination.[10] It can be quickly performed by an experienced examiner and highly accurate information obtained about the presence or absence of acute thrombosis in the deep venous system. The lower extremity examination involves the posterior tibial, popliteal, superficial femoral, and common femoral veins. These are localized by first identifying their adjacent artery, then moving the Doppler probe slightly to detect the low frequency venous signal.

TABLE 1.—Risk Fastors for DVT in Trauma.

CNS Injury with Paralysis
Femoral Fracture
Pelvic Fracture
Tibial Fracture
Multiple Injury
Immobilization

TABLE 2.—Characteristics of Venous Doppler Examination.

Patency
Spontaneity
Phasicity
(Respiratory Variation)
Proximal and Distal Augmentation
Competence
Pulsatility

Veins are examined for characteristics associated with thrombosis (Table 2). Sumner and Lambeth[11] have reported that well over 90% of patients with acute DVT will have a positive examination; a negative study is over 95% accurate in excluding this disease. If a patient has equivocal results then venography is indicated.

The safety and ease of performance of the venous Doppler examination along with its reliability make it ideal for screening high risk patients. It can be done in limbs with clinical signs suggestive of acute DVT as well as in asymptomatic limbs.

Strain gauge or impedance plethysmography can also be utilized at the bedside for the detection of DVT. A strain gauge plethysmograph utilizes a mercury-in-silastic gauge placed around the calf to measure changes in volume directly.[12] The impedance plethysmograph measures changes in calf volume indirectly by detecting alterations in a weak electric current passed between two electrodes encircling the calf.[13] Both of these examinations are performed by elevating the limb under study and occluding venous return at the thigh level by inflating a large cuff to approximately 50 millimeters of mercury for a standard period (usually two minutes). The degree of filling of the calf veins during this period (venous capacitance) and the rate of outflow after instantaneous deflation of the cuff (venous outflow) can be used to detect limbs with obstruction proximal to the calf veins. Limbs with acute DVT will exhibit a reduced venous outflow in relation to capacitance. Barnes et al[12] reported that the sensitivity and specificity of this technique in detection of DVT from the popliteal vein proximally are similar to those noted above with the Doppler. Unlike the Doppler, however, it is not useful for the detection of calf vein thrombosis.

The frequent use of prolonged central venous catheterization via the subclavian vein for fluid monitoring or hyperalimentation and Swan-Ganz pulmonary artery catheters has resulted in an increasing incidence of subclavian vein thrombosis. Routine daily Doppler screening of patients with these valuable monitoring devices in place may permit early detection of alterations in flow in the upper extremity veins due to subclavian vein occlusion which dictates the need for immediate removal of the catheter.

Summary ● In the detection and evaluation of hemodynamically significant arterial injuries, in the intra- and postoperative evaluation of a vascular repair, and in the diagnosis and prevention of complications related to arterial catheterization and deep venous thrombosis, judicious application of noninvasive diagnostic techniques will prove valuable in the trauma patient. The techniques involved can be easily mastered by the well-trained trauma surgeon and the equipment utilized is in most cases relatively inexpensive. By using these techniques to obtain physiologic information about the characteristics of blood flow in the arterial and venous systems, the trauma surgeon can broaden his diagnostic horizons and provide more thorough and effective care for the seriously injured patient.

References

1. Barnes, R.W. and Wilson, M.R.: Doppler Ultrasonic Evaluation of Peripheral Arterial Disease, University of Iowa Press, Iowa City, 1976.
2. Whitesides, T.E.; Honey, T.C.; Harada, H.; Holmes, H.E., and Morimoto, K.: Simple Method for Tissue Pressure Determination, Arch. Surg. 110: 1311-1313, 1975.
3. Bedford, R.F. and Wollman, H.: Complications of Percutaneous Radial-artery Cannulations: Objective Prospective Study in Man, Anesthesiology 38: 228-236, 1973.
4. Gardner, R.M.; Schwartz, R.; Wong, H.C., and Burke, J.P.: Percutaneous Indwelling Radial-artery Catheters for Monitoring Cardiovascular Function. Prospective Study of Risk of Thrombosis and Infection, New Engl. J. Med. 290: 1227-1231, 1974.
5. Graham, W.P.; Blakemore, W.S.; Waldhausen, J.A.; et al.: Tissue Necrosis from Vascular Complications of Upper Extremity After Arterial Catheterization, Rev. Lat. Am. Chir. Plast. 28: 37-46, 1973.
6. Mandel, M.A. and Dauchot, P.J.: Radial Artery Cannulation in 1,000 Patients. Precautions and Complications, J. Hand Surg. 2: 482-485, 1977.
7. Coon, W.W.: Epidemiology of Venous Thromboembolism, Ann. Surg. 186: 149-164, 1977.
8. Kakkar, V.V.; Howe, C.T.; Nicolaides, A.N.; Renney, J.T.G. and Clarke, M.B.: Deep Vein Thrombosis of Leg. Is There a "High Risk" Group? Am. J. Surg. 120: 527-530, 1970.
9. Albrechtsson, U. and Olsson, C.G.: Thrombotic Side Effects of Lower Limb Phlebography, Lancet 1: 723-724, 1976.
10. Barnes, R.W.; Russell, H.C., and Wilson, M.R.: Doppler Ultrasonic Evaluation of Venous Disease, University of Iowa Press, Iowa City, 1975.
11. Sumner, D.S. and Lambeth, A.: Reliability of Doppler Ultrasound in Diagnosis of Acute Venous Thrombosis Both Above and Below the Knee, Am. J. Surg. 138: 205-211, 1979.
12. Barnes, R.S.; Hokanson, D.E.; Wu, K.K., and Hoak, J.C.: Detection of Deep Vein Thrombosis with Automatic Electrically Calibrated Strain Gauge Plethysmograph, Surgery 82: 219-224, 1977.
13. Hull, R.; von Aken, W.G.; Hirsch, J.; Gallus, A.S.; Hoicka, G.; Turpie, A.G.G.; Walker, I., and Gent, M.: Impedance Plethysmography Using Occlusive Cuff Technique in Diagnosis of Venous Thrombosis, Circulation 53: 696-700, 1976.

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Anorexia nervosa: an update

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ABSTRACT: Anorexia Nervosa (AN), voluntary refusal to eat and the consequent inanition, essentially remains a disorder of unknown etiology. While psychological factors have been emphasized in its causation and personality profile of patients have been delineated over a long period of time, only recently have we begun to agree on the basic criteria for its diagnosis. This paper is a summary of the currently available information on the diagnostic criteria and the research findings related to endocrine and nervous system functions.

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Anorexia nervosa (AN), voluntary refusal to eat and the consequent inanition, is a serious and life-threatening disorder of essentially unknown etiology. It predominantly affects adolescent girls, although several cases affecting males[1,8] and older persons[9,10] have been documented. As Virgersky has noted,[11] "It is of interest to psychiatrists because of its psychological and perceptual abnormalities, to the endocrinologists because of its hypothalamic-pituitary-end organ dysfunction, to gynecologists because it frequently presents as secondary amenorrhea, to pediatricians because it often occurs in preteenagers, to internists and specialists because of its protean manifestations and complications."

Morton [12] is reported to have recognized the disorder first in 1689. About two centuries later Gull in London[13] and Laseque in Paris[14] rediscovered and described it independently. Gull, however, is credited with coining the term "anorexia nervosa" in 1888.

Exact figures about its epidemiological aspects are lacking. However, there is a consensus of sorts among knowledgeable clinicians and researchers that AN is being seen more and more frequently in the clinics,[15,18] that it seems to occur more often in the upper and middle classes,[15,18,19] that it is seen in smaller families with larger than usual female representation,[15,19] that the children appear to be "early born and of older parents,"[19] and that these children are overachievers.[20] The estimates of its incidence and prevalence vary widely. However, again, the consensus seems to be that one out of every one to two hundred teenage girls could be affected by it.[15] Baldwin *et al* [21] found its occurrence in northeast Scotland to be 1.6 per 100,000 population. Gardner *et al*[22] found its occurrence to be 0.37/100,000 in New York State in 1963. Wing[23] calculated its incidence in Camberwell in 1968 to be 0.66 per 100,000. Theander reported a survey of cases (between 1951 and 1960) in Sweden and found the incidence to be 0.5/100,000. Identical twin

reports are very few. Debow[24] reported that there are reports of two identical twins who were discordant for AN (by Bruch) and three identical twins who were concordant. The disease affects youngsters soon after puberty, but at least one report mentions that 11% of the cases were of premenarche onset.[15] High frequency of weight aberrations and primary affective disorders (22%) among the relatives of patients were reported recently,[26] raising questions as to whether the illness is a depressive equivalent.

Diagnostic criteria ● Confusion and lack of uniformity reigned over the criteria for diagnosis over the years and hampered research considerably. In 1980, the American Psychiatric Association, in an ambitious attempt to create some objectivity in psychiatric diagnoses, published the third revision of its Diagnostic and Statistical Manual[27] (DSM III). It recommended that the following criteria be used to make a diagnosis of AN:

A. Intense fear of becoming obese, which does not diminish as weight loss progresses.
B. Disturbance of body image, e.g., claiming to "feel fat" even when emaciated.
C. Weight loss of at least 25% of original body weight or, if under 18 years of age, weight loss from original weight plus projected weight gain expected from growth charts may be combined to make the 25%.
D. Refusal to maintain body weight over a minimal normal weight for age and height.
E. No known physical illness that would account for the weight loss.

Psychological profile ● AN patients voluntarily restrict food intake in spite of continued and severe weight loss. Some authors feel that the term "anorexia" is a misnomer because the loss of appetite as such is rare and develops only late in the course of the illness.[28] They prefer to eat limited amounts of low calorie foods, will often prepare elaborate meals for others, and resort to hoarding, concealing or throwing away their own food. Some of them alternate between total abstinence from food to episodic binge eating which is often followed by self-induced vomiting, use of laxatives or diuretics. They are preoccupied with food but their attitude toward it appears to be distorted.[20] Their body image is distorted as well.[29] (Body image is one's mental image of one's self including the physical appearance and one's attitude and feelings towards it.) They "feel" overweight in spite of the cachexia, deny their illness, resort to overactivity and exercise in the face of weakness and fatigue. Bruch[30] considered a realistic body image of an AN patient to be a "precondition for recovery." They also appear to show a distorted perception of internal stimuli such as the sense of fullness or satiety. Some authors are recently beginning to separate "primary AN" patients[31,32] from "secondary" ones but this division does not appear to be clear, valid or useful at this time.

1. Hypothalamic-pituitary-ovarian axis ● Recognition of the preponderance of young females with amenorrhea among AN patients led to investigation of their ovarian function. Urinary excretion of estrogens was found to be diminished[32] and the ovaries were considered to be defective. When the urinary excretion and plasma levels of luteinizing hormone (LH) and follicle stimulating hormone (FSH) were also found to be diminished[33,34] instead of being increased due to negative feedback from the lowered estrogen level, it was realized that the ovarian dysfunction was secondary to the pituitary or hypothalamic malfunction. The LH levels were reported to be 8.4 se mIU/ml[35] and <8 μg/dl.[25] The FSH levels were reported to be 3.9 mIU/ml[35] and <10 μg/dl.[25] Since the secretion of gonadotropins is considered to be under the control of luteinizing hormone releasing hormone (LH-RH) secreted by neurones in the hypothalamus and reaching the pituitary via portal circulation, the effect of administration of LH-RH on the pituitary was studied. Some authors found normal responses to LH-RH in AN.[36] This was cited as evidence that the ability of the pituitary to synthesize LH is unaltered and that the dysfunction of LH secretion is solely due to hypothalamic dysfunction.[37] Others, however, found that the LH secretion failed to show the expected biphasic response to administration of estrogen[38] and its plasma level did not rise when evoked by the administration of an antiestrogen, clomiphene.[39,40] Also, the LH response to administration of synthetic LH-RH was reported to be "blunted,"[41] attenuated or impaired.[20,42-45] These data imply that the impaired secretion of gonadotropins is due to dysfunction of the ovary. However, assuming the possibility that the pituitary had become unresponsive to hypothalamic secretions from chronic LH-RH deficiency, LH-RH was administered over a period of time. This did restore the pituitary responsiveness to normal.[46,47] We have no way of directly measuring the level or the amount of LH-RH secreted, but circumstantial evidence seems to point to its chronically deficient secretion in AN. Since the LH and FSH responses to LH-RH are influenced by severity of emaciation and return to normal when weight is gained[48,49] it is not clear if the diminished secretion of LH-RH is a dysfunction or an adaptation to weight loss. Evidence for the "adaptational" theory comes from the fact that amenorrhea, diminution of gonadotropins and even altered responsiveness to LH-RH can develop among women with simple loss

of weight.[50] On the other hand, the possibility of hypothalamic dysfunction cannot be dismissed since a significant percentage (50-65%[17,51]) developed amenorrhea before weight loss began and return to normal weight did not necessarily lead to resumption of the menstrual period.[29]

Current research also indicates that the pattern of LH secretion is immature and prepuberal.[37,52,53] An increase in the level of 2-hydroxyestrone, due to preferential use of this route for metabolism of estrogens in AN, with compensatory decrease in estradiol, was considered to be responsible for this "regression" of LH secretory pattern.[53] Other authors confirmed the lower levels of estradiol (the biologically active portion of estrogen[35,45,54]) which were in the range of 20.4 pg/ml[35] to <33 pg/ml.[45]

Response of FSH to gonadotropin releasing hormone (GnRH) was reported to be normal.[45,55] Serum testosterone levels were reported either to be high, measuring 2.8 ng/ml (0.8 ng/ml in controls[51]) or to be normal, 0.73 ng/ml.[35] It was, however, diminished in male AN patients.[56]

2. Hypothalamic-pituitary-adrenal axis ● Initial observations of reduced urinary excretion of the metabolic products of cortisol led to the belief that AN patients either had defective adrenal glands or that the pituitary was not secreting enough ACTH. As technological sophistication increased, the blood cortisol levels were measured and found, contrary to expectations, to be high.[20,25] The mean morning plasma cortisol concentration was 23.3 μg/100 ml (10 μg/100 ml in controls).[57] Mean 24-hour plasma cortisol concentration was noted to be significantly higher as well.[53] The decreased urinary excretion of steroids, as observed earlier, was shown to be due to slowed cortisol metabolism in AN.[58] Loss of diurnal variation of cortisol secretion was reported initially.[20] However, later work revealed[53] that the plasma cortisol level in AN did not fall to zero between 2300 and 0200 hours, as in the controls, and the levels remained elevated in late afternoons and early evenings. This gave the appearance of loss of diurnal rhythm when only AM and PM samples were obtained. The elevated serum cortisol levels were noted to be due to delayed degradation[59] and increased half life[53] (78 minutes instead of normally noted 60 minutes). Also, the cortisol secretion activity showed an increased number of secretory episodes[53] and increase in the time spent in secretory activity.[53,59] An increase in the urinary excretion of free and unconjugated cortisol was also noted. Other studies showed that glucocorticoid feedback was reduced,[59] responsiveness to exogenous ACTH[20] and metyrapone[33] was exaggerated, but the binding capacity of corticosteroid binding globulin (CBG) for cortisol was normal.[57] Also, tetrahydrocortisol to tetrahydrocortisone ratio was significantly higher in AN[53] perhaps due to increase in the level of tetrahydrocortisol. The androsterone to etiocholanolone ratio was lower.[53] These findings were also seen in hypothyroidism and when T_3 was administered reverted back to normal.[53] Also, the AN patients showed a differential response to dexamethazone.[20,59] Those with the lowest weight showed the suppression failure (Type I). Some of the others showed normal suppression until 11:00 a.m. but then the suppression failed ("early escape" Type II). The rest showed essentially Type II response, but it failed to return to normal upon weight gain (Type III).

These data indicate that, if anything, the hypothalamic-pituitary-axis is overactive and is producing more cortisol in relation to body size[49] of the AN patient, perhaps due to the effect of psychological stress acting on the hypothalamus.

3. Hypothalamic-pituitary-thyroid axis ● Since most of the AN patients, clinically, show dry skin, bradycardia, sensitivity to cold, and constipation, thyroid functions were investigated. The reported mean serum thyroxine(T4) levels varied from low[25,60,61] to low normal.[35,53,62] The measured levels were reported to be 6.1 μg/100 ml,[35] 7.2 μg/100 ml (controls being 9.5),[62] and 5.8 μg/100 ml (control being 7.7).[61] The level of triiodothyronine (T_3) has been noted to be uniformly low.[25,53,60,62] The measured levels were reported as 49.7 ng/100 ml (controls 106[62]) and 82 ng/100 ml (controls 158[61]). Only one study reported it to be in normal limits, 102.3 ng/100 ml.[35] The free thyroxine index of 3.8 was considered to be low normal.[35] The T_3 to T_4 ratio was low in AN, 1.48 as opposed to 2.21 in controls.[61]

Thyroid stimulating hormone (TSH) level was considered to be normal[35,60,62] except in one study.[25] TSH response to thyrotropin releasing hormone (TRH) was normal,[62] 12.0 mIU/ml.[35] T_3 response to TRH showed a smaller rise than expected (36 ng/100 ml).[35] Other researchers, however, noted a delayed rise (60-120 minutes instead of usual 30 minutes) of both T_3 and TSH in response to TRH.[20,60,61] Level of reverse T_3 (r T_3), an inactive isomer of T_3, showed a significant rise indicating that there was a preferential conversion of T_4 in the peripheral blood to rT_3. The fact that TSH is not higher indicates either that rT_3 has no feedback potential or that the "set point" at which pituitary thyrotroph cells are inhibited by thyroid hormones is altered.[60] There is some evidence of dopaminergic inhibition of TSH secretion as L-dopa reduces TSH concentration.[60] There appears to be excessive dopaminergic activity at central receptors in AN.[63] The low "T_3 syndrome" of low T_3 with normal T_4 and TSH is commonly seen in starvation states and reverts to normal on weight gain.

4. Other hormones ● Basal plasma growth hormone (GH) level is generally reported to be elevated[25,41] but not all researchers agree.[20] This elevation seems to reflect caloric deprivation over a few days preceding the measurement of GH. When provoked with Gn RH or with glucose, the GH shows a paradoxical rise.[64] It also registers a rise when TRH is administered.[41] These responses return to normal on weight gain. GH response to L-dopa, found to be subnormal,[65] remains abnormal even after partial weight gain. This suggests possible dysfunction in the regulation of GH secretion at hypothalamic level.

Prolactin (PRL) is reported to be a stress dependent hormone. Its mean plasma level was reported to be elevated (19.4 ng/ml) in AN.[35] It too showed a rise in response to GnRH[64] but responded normally to TRH.[35,41]

AN patients concentrate urine poorly when dehydrated, perhaps because:

1. They often consume large quanities of water which may increase the urinary output and wash out the concentration gradient in renal medulla and thus diminish the kidney's capacity to concentrate urine.
2. Their protein intake is deficient with the consequent diminution in the synthesis and availability of urea to help create the concentration gradient necessary to concentrate urine maximally.
3. The antidiuretic hormone (ADH) secretion may be partially deficient. Administration of vasopressin improves this concentrating ability.[20] Since hypothalamic centers produce the ADH, its partial deficiency points to hypothalmic dysfunction.

Kidney functions[16] were tested in AN. Glomerular filtration rate (GFR) was down as was the capacity to extract water. This was noted to be due to decreased membrane permeability and not merely to decreased renal blood flow. Maximal urinary concentration capacity was reduced. All of these parameters improved on weight gain.

5. Direct observation of hypothalamic functions ●

a. Water conservation

When tested for the ability to concentrate urine following dyhydration plus exogenous vasopressin, four out of five patients with AN showed 13% to 48% increase in osmolality (partial diabetes insipidus).[36]

b. Thermoregulation

AN patients were clearly separated from the controls on the basis of their responses to cold and heat. During hypothermia the AN patients showed no increase in the core temperature, failed to stabilize the body temperature and did not shiver appropriately. In response to hyperthermia, their vasoactivity was equivocal and the core temperatures remained abnormally elevated.[36]

c. Carbohydrate metabolism

Most of the AN patients had fasting hypoglycemia (glucose level below 70 mg/100 ml). In response to intravenous insulin the glucose level was reduced by greater than 50% and the hypoglycemia persisted beyond the 90 minutes.

6. Neurological evidence ● Several cases are on record where the clinical picture was one of AN but one to six years later, a tumor in the hypothalamic area was discovered[66-68] and diagnosed as astrocytoma or ectopic pinealoma. Ahsanuddin and Nyeem also reported (in press) the occurrence of an AN-like clinical picture in patients with tumors in the fourth ventricle.

EEGs in AN patients often show mild but generalized nonspecific abnormality indicating its possible origin in the deep midline. EEGs[69] showed abnormal background activity in about 42-59% of the cases in various research recordings. EEGs were often unstable on hyperventilation and showed epileptiform paroxysmal dysrhythmias in about 15% of the cases. All night sleep EEGs showed significant decrease in the tonic as well as phasic components of REM. This sleep profile seemed to persist even after weight gain. Also, similar patterns were noted in siblings of patients who were in remission from AN. Since reduction in phasic REM is considered to be a reliable indicator of CNS dysfunction,[69] the EEG changes could not be solely due to weight loss and electrolytic changes. Also, there was a noticeable reduction in slow wave sleep. One speculation was that the EEG abnormalities could be due to ventricular dilatation demonstrated on CT scan[69] in several cases of AN.

The experimental lesions in the hypothalamic area constitute another source of evidence implicating the hypothalamus in eating disorders. Lateral hypothalamic lesions in rats produced aphagia, adipsia, akinesia, catalepsy and sensory neglect ("the lateral hypothalamic syndrome"), [70] leading to inhibited food intake and even starvation. Lesions in the ventromedial area of the hypothalamus produced voracious hunger and eventual obesity. The anterior hypothalamic area is postulated to have centers for thirst and thermoregulation. Anteriorly and medially placed lesions in the hypothalamus caused decreased blood glucose level and increased sensitivity to insulin in cats.[71] The posterior hypothalamic area seems to control the shivering.[36]

Stricker[70] and others have also provided some "chemical evidence" of the importance of the hypothalamic area in AN-like illnesses. It is postulated that the lateral hypothalamic lesions damage the dopaminergic neurons passing through

that area on their way to the cortex, and thereby cause aphagia (not loss of appetite). These lesions have been demonstrated to lower the dopamine concentration in the forebrain area of the projection of the fibers presumed interrupted. To test if such reduction in the dopamine was the underlying pathology, 6-hydroxy dopamine (6-HDA), a dopamine depleting neurotoxin, was injected in rats intracranially. The rats did develop the "lateral hypothalamic syndrome" without any visible damage to the neural tissue. To produce signs and symptoms this way, however, requires depletion of about 95% of the dopamine. The electrolytic lesions in the lateral hypothalamic area, on the other hand, can cause the same signs and symptoms with the depletion of substantially less dopamine. Although the role played by the altered level of dopamine remains unclear, some researchers[72] proceeded with the clinical trial of catecholamine agonists in AN. The results, however, were mixed.

7. Other miscellaneous investigations ● Plasma norepinephrine (NE) level was reported to be low.[73] Plasma dopamine-β-hydroxylase activity was normal.[66] Plasma 3-methoxy 4-hydroxy phenol glycol (MHPG) level was low,[74] but was noted to vary with weight gain.[75] Twenty-four hour urinary MHPG was reported to be low and also plasma homovanilic acid (HVA).[73] Plasma levels of folic acid, ceruloplasmin, iron, vitamin A, and retinal binding protein (RBP) were reported to be normal.[76] However, the iron binding capacity was reported to be low (26 μg/100 ml) as well as the plasma zinc level (73.9 μgm/dl as opposed to 83.2 in controls).[76-78] Urinary zinc was also low (129.5 μg/24 hrs).[3] Hair zinc was normal (201 to 204 μg/g).[76,77] Plasma copper was significantly low (85 μg/dl as opposed to 123.2 in controls).[76,77] Hair copper level was high (24 μg/g vs 12.7 in controls).[76,77] Mean plasma carotene levels were high (218 g/dl vs 132 in controls).[76,77] Ability to recognize taste was impaired,[77] especially for bitter and sour substance[76] and has been speculated to be due to Zn deficiency.

Several authors have reported electrolyte changes reflecting hypochloremic alkalosis with low Cl, high HCO_3, low K^+ and high Mg^{++}.[79,80]

The EKGs [79] showed sinus rhythm with rates ranging from 42-116/min. T waves were often inverted and ST segments were flattened. QT intervals were somewhat lengthened.

Hematological workups showed reduced total leukocyte, absolute neutrophil, lymphocyte and monocyte counts.[81] Despite severe panleukopenias, AN patients had no more infections than controls. This may be due to normal bone marrow neutrophil reserves as demonstrated by the increase in neutrophil counts following injection of hydrocortisone. Pancytopenias (with WBC <5000/cu mm, platelets $<150,000$/cu mm and Hgb <10g/dl), hypoplastic bone marrow and acanthocytosis have also been reported.[82] Bone marrow in AN seems to differ from that in other malnutritions. In AN, fat content is reduced and an amorphous substance (consistent with acid mucopolysaccharide) accumulates "to provide structural support" to the marrow cells. This mucopolysaccharide accumulation appears to be due to carbohydrate and caloric deprivation. In other types of starvation, where protein is also unavailable, bone marrow hypoplasia occurs but without mucopolysaccharide accumulation. The acanthocytosis is considered to be due to low levels of β-lipoproteins leading to inefficient cholestrol removal from the RBC resulting in redundant cell membrane and consequent spiculation. An alternative explanation could be that it is due to the loss of RBC membrane microviscosity when the cholestrol-phospholipid ratio in the low density lipoproteins rises, as seen in AN.

The emerging data, thus, point to the vital role played by the hypothalamus. However, we are far from certain as to whether this role should be interpreted as one of "producing AN" or of "helping the body adapt" to the weight loss. Also, it fails to contradict the prevailing view that psychologically traumatic events initiate the illness. Thus, discovery of a constitutional or genetic vulnerability in AN continues to remain a possibility.

(References available on request)

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Current status of immunotherapy in stage IV renal adenocarcinoma

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ABSTRACT: The rationale for use of immunotherapy in renal adenocarcinoma is discussed in detail. The cure rate is higher than chances for spontaneous regression of the tumor. A patient with Stage IV renal adenocarcinoma is described who received such treatment and remains clinically cured 11½ years after surgery.

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Systemic chemotherapy is ineffective in the treatment of renal adenocarcinoma with metastasis. The original enthusiasm for hormonal treatment has not been substantiated.[1] Renal adenocarcinoma is one of the tumor types in which spontaneous regression has been reported, although the incidence is less than 1% and exceedingly rare in Stage IV types.[2] This spontaneous regression has been felt to be engendered by immune factors of the host.[3]

A review of many research groups in the United States and Europe, who have used an immunotherapeutic approach to renal adenocarcinoma, has shown that their patients achieved a much greater success rate than can be attributed to spontaneous regression.[3]

Report of case • A 61-year-old white female was admitted in March 1971 because of low grade fever of several days, chilliness, sudden onset of left lower chest pain, worse on movement, moderate abdominal distention and constipation.

Her past history was unremarkable except for panhysterectomy ten years previously for a very enlarged fibroid uterus and surgical repair of a nasal septal deviation six years previously. The patient smoked one and a half packs of cigarettes daily. A skin lesion on her back, present for eight months, was surgically removed and found to be a localized basal cell carcinoma of the skin.

On admission, an x-ray of the chest was interpreted as normal as was a complete roentgen examination of the entire gastrointestinal tract, including the gallbladder. Intravenous pyelogram revealed nonfilling of the right kidney and a retrograde revealed a nonfunctioning right kidney. The left kidney was normal. An aortogram showed a rapidly growing hypernephroma of the right lower

pole of the kidney which completely occluded the right renal vein and extended into the inferior vena cava. On April 1, 1971, a radical right nephrectomy was performed with resection of the involved portion of the vena cava. The renal vein was found to be totally filled with tumor thrombus extending into the vena cava the edge of which was unattached intralumenly in direct contact with the venous return blood. No abdominal metastasis was noted during the operation, nor was there any involvement of the liver. The right adrenal was bound to the renal capsule and had to be removed with the radical excision. Microscopic examination of the renal specimen revealed large, clear cells with marked variation in size and irregular nuclei. There were a few giant cells present. The uninvolved portion of the kidney showed chronic inflammation with interstitial collections of lymphocytes. The tumor grossly extended to the surrounding soft tissue outside the kidney.

The postoperative course was uneventful except for continuing pain in the left chest. On reevaluation of the admitting chest film, a metastatic lesion of the posterior area of second left rib and a localized small left lower lung lobe infarct was noted. Cobalt therapy was given to the second rib with relief of the pain.

Repeat bone scans in June 1971 were negative. In December 1971 lesions of the seventh thoracic vertebrae and the midlumbar vertebrae were present and 3,500 rads skin dose high voltage radiation was given. Subsequent bone scans throughout the years, including 1981, have remained normal.

No other evidence of metastasis has been noted. The patient fell and fractured her right hip in 1980 and no pathologic fracture was found at operation. A successful prosthesis was implanted with good recovery. At the present time, she is 72 years old, normal except for controlled glaucoma of both eyes and mild degenerative arthritis. Thus, postoperative radiotherapy was limited to the affected bones on two occasions, May 1971 and December 1971, present at different sites. No systemic chemotherapy was given. Immunotherapy using an autogenous tumor vaccine* was given parenterally at weekly intervals, then biweekly from May 1971 through 1972. Subsequently it was given at monthly intervals and later bimonthly until the vaccine material was exhausted in 1977.

***Preparation of Autogenous Vaccine:**

1. Obtain an adequate amount of tumor specimen in saline solution in a sterile container from the operating room.
2. The surrounding fatty and normal appearing tissue is dissected away and remaining tissue is minced and then sonicated at 0.4 watts per cm sq for 5 minutes.
3. Dilute the tissue with buffered saline to a 10% w/v and extract for 48 hours at 40F.
4. Filter through Millipore filters and check for sterility and nonviability.
5. Mix 3.5 cc extract solution and 0.25 cc S. typhoid vaccine (250 million organisms) Wyeth and 0.25 cc E. coli (1250 million organisms) Hollister-Stier.
6. Add to 4 cc emulsifier which contains Drakeol (2 parts) to Arlacel A (1 part) and emulsify.
7. Inject 0.25 cc to 0.50 cc deep subcutaneously at site distant from tumor origin and its regional nodes.

Discussion ● Pathologic staging currently accepted for renal adenocarcinoma, a modified Flocks and Kadesky classification, would definitely classify the patient reported here as an advanced Stage IV.[4] While spontaneous regression could occur, it is agreed that renal vein carcinomas, extending into the inferior vena cava, have a dismal prognosis and a complete 11 year cure is exceedingly rare.[5]

The host's immunologic strength, as determined by cell mediated immunity, deteriorates as the extent of malignant involvement increases; with improvement following removal of the tumor, confirming that a cancer operation may act as immunotherapy by removing cancer cells that have produced lymphocyte defects and immunodepression and thereby allowing the patient's immune system to recover.[6,7] The patient's functional capacity is also of great importance and those who maintain or improve their nutritional status, strength and activity following tumor surgery have a better prognosis.[2] Tumor immunotherapy has emerged as a new discipline in the past 20 years, particularly since Foley demonstrated in 1953 that tumors possessed distinctive antigens that are different from the histocompatible antigens of their hosts and are capable of evoking both cellular and humoral immune responses in the cancer patient.[8] Unfortunately the effectiveness of the host can become limited if the growing tumors evade the host's protective immune surveillance by producing specific and nonspecific immunosuppression through a variety of mechanisms. These include immunosuppressive effects of the tumor antigens or the antibody complexes, suppressor T cells and, possibly, specific factors related to the tumor itself.[9] In the process of immunotherapy, one tries to either enhance or stimulate the body defenses which include T cells that cooperate with the B lymphocytes to help them produce antibodies and to produce killer T cells that function through the production of lymphokines. Macrophages also process tumor antigen and can be activated to killer macrophages. To be avoided is the production of T suppressor cells which inhibit the immune responsiveness of the host to the tumor antigens.[10-12]

Tumor immunotherapy can be approached in four principle ways and combinations of these 1. Nonspecific immunotherapy in which one uses bacterial antigens such as BCG or C parvum to act

as potent nonspecific stimulators of the reticuloendothelial system, and also enhance the T and B cell functions. Other agents can also be used in such manner as levamisole, an antihelminthic drug, that was found to stimulate the immune response. Another important modality that we have been using is a dialysed factor obtained from leukocyte extracts, originally called "transfer factor" by Lawrence. This factor can transfer both nonspecific and specific stimulation to the recipient. Other cellular agents like thymosan and interferon have been used more recently. 2. Passive immunotherapy involves the use of tumor specific antisera. A recent offshoot of this is the use of specific antibodies as carriers for tumorcidal agents.[13,14] 3. Adoptive immunotherapy involves the administration of immune lymphoid cells or subcellular components (RNA) from another host rendered immune to the specific tumor.[15] 4. Active specific immunotherapy involves the active stimulation of the immune system with either autologous tumor vaccine obtained from the patient's own tumor or allogenic vaccine from a donor or bank of similar type donor tumors.

Renal adenocarcinoma is particularly suitable for active specific immunotherapy. The primary growth is usually large enabling one to get a good size specimen for the preparation of vaccine.[16] Clinically the tumor is not recognized until late, after metastasis has occurred, because it is fast growing and usually asymptomatic. Since active tumor vaccine therapy is less effective when the host tumor burden is large, it is recommended that the primary growth be removed as completely as possible and metastatic areas receive localized high voltage radiotherapy to remove such lesions that cannot be easily resected.

Before immunotherapy is first started, and when renal carcinoma has been diagnosed, an evaluation of the patient's immune system should be made. The single most effective procedure for evaluating cell mediated immunity (CMI) is the 48-hour skin test for such recall antigens as mumps, SK-SD, candida, trichophyton, PPD, coccidioidin and, if necessary, a primary contact allergen, DNCB.[17] This can be done in any hospital or laboratory setting. It is simple, inexpensive, and can be used later for follow-up evaluation of the patient's response after surgery and during immunotherapy to ascertain if the patient's CMI is improving.[18,19]

Various research groups studying active immunotherapeutic programs have prepared their autologous antigens with their own modifications. No matter which modification is used, the aim is to make a potent concentrated vaccine containing specific tumor related antigens so that the host's immune system can recognize it as foreign and attack.[20] To prepare a "pure" tumor antigen is valuable for research identification and evaluation; unfortunately, frequently there are different cloned subpopulations of the original tumor in the same or different metastases, supporting the heterogeneity of the original neoplasm. This may be the reason why too purified tumor vaccines will help the host eliminate some metastases, but not others.[16,21]

In our approach, gram negative bacterial products are added to the tumor antigen extract, sonified and then made into an incomplete Freund's adjuvant. This methodology has been previously shown to greatly enhance the immunogenic response of the patient. By keeping all of the original tumor constituents in the vaccine, we have enhanced the probability that the vaccine contains all of the heterogenous tumor cells.

We have used autogenous tumor immunotherapy for twenty-plus years with a positive success rate in solid malignancies of the lung, breast and colon when the primary prerequisite of minimal tumor residual and adequate mass of tumor for good vaccine preparation is present. Over the years, benefiting by the increase of investigative knowledge in the immunologic factors of cancer, we have added other immunoenhancers that were available, such as transfer factor. We have worked conjointly with surgeons, systemic chemotherapists and radiotherapists, encouraging them to reduce the patient's tumor load to the bare minimum.

Reports by research groups in diverse parts of the world, such as those represented by Tykka, Tallberg, Schapira, have clearly defined successful cures, using stringent criteria that greatly exceed the spontaneous regression rate.[22,24] The "Clinical Subcommittee on Biological Response" is very impressed with these results. They and other editorial reviewers feel that renal adenocarcinoma should have high priority for Phase II immunotherapy trials in man.[3]

Rapid strides continue to be made in our understanding of the secondary immunodeficiencies that can occur in cancer. This should provide us with even more exact ways to enhance and stimulate the immune responses in this exciting approach to cancer therapy.

REFERENCES

1. Lokich, J.J. and Harrison, J.H · Renal Cell Carcinoma Natural History and Chemotherapeutic Experience, J. Urol. 114:371-374, 1975.
2. Neidhart, J.A.; Murphy, S.G.; Hennick, L.A., and Wise, H.A : Active Specific Immunotherapy of Stage IV Renal Carcinoma with Aggregated Tumor Antigen Adjuvant, Cancer 46:1128, 1980.
3. Subcommittee on Biological Response Modifiers (BRM) of the DCT Board of Scientific Counsellors Interim Report, Sept. 30, 1979
4. Flocks, R.H. and Kadesky, M.C.: Malignant Neoplasms of Kidney, Analysis of 353 Patients Followed 5 Years or More, J. Urol. 79:196, 1958.
5. Skinner, D.G.; Pfister, R.F., and Colvin, R.: Extension of Renal Cell Carcinoma into Vena Cava: Rationale for Aggressive Surgical Management, J. Urol. 107:711, 1972.
6. Giuliano, A.E.; Rangel, D.; Golub, S.H.; Holmes, E C., and Morton, D.L.: Serum-Mediated Immunosuppression in Lung Cancer, Cancer 43:917, 1979.

7 Morton, D.L. Changing Concepts of Cancer Surgery: Surgery as Immunotherapy, Am J of Surg 135:367, 1978
8 Jirsch, D.W. and Falk, R.E. Solid Tumor Immunotherapy. Immunologic Engineering, Chap. 10, P. 315, University Park Press, Edited by D. W. Jirsch.
9 Fahey, J.L.; Brosman, S.; Ossorio, R.C.; O'Toole, C., and Zighelboim, J. Immunotherapy and Human Tumor Immunology, An. Int. Med. 84:454-465, 1976.
10. Vetto, R.M. Immune Response in Cancer Patients. Immunologic Engineering, Chap. 5, P. 135. University Park Press, Edited by D. W. Jirsch.
11 Hakala, T.R.; Castro, A.E.; Elliott, A.Y., and Fraley, E.E. Humoral Cytotoxicity in Human Renal Cell Carcinoma, Investigative Urology 11:405, 1974
12. Dekernion, J.B., Ramming, K.P., and Gupta, R.K. Detection and Clinical Significance of Antibodies to Tumor-Associated Antigens in Patients with Renal Cell Carcinoma, J. Urol. 122:300, 1979.
13. Ghose, T.; Norvell, S.T.; Buche, A., Cameron, D., Bodiertha, A.; and MacDonald, A.S. Immunochemotherapy of Cancer with Chlorambucil-Carrying Antibody, Br. Med J. 3:495, 1972
14 Shearer, W.T. and Parker, C.W. Antibody and Complement Modulation of Tumor Cell Growth *In Vitro* and *In Vivo*. Fed Proc. 37:2385-2389, 1978
15. Brower, P.A.; Dekernion, J.B., and Ramming, K.P. Immune Cytolysis of Human Renal Carcinoma Mediated by Xenogeneic Immune Ribonucleic Acid, J Urol. 115:243, 1976.
16. McCune, C.S.; Schapira, D.V., and Henshaw, E.C.: Specific Immunotherapy of Advanced Renal Carcinoma: Evidence for Polyclonality of Metastases, Cancer 47:1984, 1981
17. Brody, N. Laboratory Tests to Evaluate Immune System, Dermatology 20:301, 1981.
18 Montie, J.E.; Straffon, R.A.; Deodhar, S.D., and Bama, B.. In Vitro Assessment of Cell-Mediated Immunity in Patients with Renal Cell Carcinoma, J. Urol 115-239, 1976.
19 Morales, A. and Eidinger, D.: Immune Reactivity in Renal Cancer. A Sequential Study, J Urol. 115:510, 1976.
20. Sanford, B.H. and Codington, J.F.. Further Studies on Effect of Neuramidinase on Tumor Cell Transplant Ability, Tissue Antigens 1:153, 1971.
21 Dexter, D.L.; Spremulli, E.N.; Fligiel, Z.; Barbosa, J.A.; Vogel, R.; VanVoorhes, A., and Calabresi, P.: Heterogeneity of Cancer Cells from Single Human Colon Carcinoma, Am. J Med 71:949, 1981.
22. Tykka, H.; Orovisto, K.J.; Lehtonen, T.; Sama, S., and Tallberg, T.: Active Specific Immunotherapy of Advanced Renal-Cell Carcinoma, Eur Urol. 4:250, 1978
23 Tallberg, T. Cancer-Immunotherapy by Means of Polymerised Autologous Tumour Tissue with Special Reference to Some Patients with Pulmonary Tumour, Scand J Resp. Dis Suppl. 89:107, 1974
24 Schapira, D.V.; McCune, C.S., and Henshaw, E.C. Treatment of Advanced Renal Cell Carcinoma with Specific Immunotherapy Consisting of Autologous Tumor Cells and C. parvum, Proc. Am. Soc. Clin. Oncol. 20:348, 1979.

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SPECIAL ARTICLE

My experiences as a member of the Florida State Board of Medical Examiners

Richard J. Feinstein, M.D.

In late October 1979, I was in my office and my secretary informed me that a woman was calling from the Governor's office in Tallahassee. I thought it was a prank telephone call but she identified herself as the appointments secretary for Governor Robert Graham. He wanted to know if I would accept a position on the State Board of Medical Examiners.

I accepted but had no idea what my duties and responsibilities would be. I was not even certain what the Board of Medical Examiners was or did. I knew only that it had something to do with granting medical licenses.

I received another telephone call the next day, this time from a reporter for the Miami Herald. I was already beginning to enjoy my newly acquired fame. I asked the patient I was with if she would mind waiting while I talked to the press. I believe she was impressed. The reporter, who specializes in medical reporting, spent the next ten minutes asking me about myself. I enjoyed it.

His article appeared a few days later. It discussed the new members of the Board who had been appointed by the Governor. The article contained a short biographical sketch of each nominee, including me. I was interested to learn that I had been appointed to a three year term, with an option of having the governor reappoint me for an additional four years. Other members were appointed for terms of from one to four years.

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I spent a great deal of time during the next few weeks asking my colleagues about the State Board of Medical Examiners. My appointment, I learned, was a prestigious one that had been sought after by a number of local physicians. There are about 20,000 licensed medical doctors in Florida and only nine can serve on the Board at any one time. Furthermore, the nine are chosen so that all geographic areas of the state have some representation. South Florida, which includes six counties and close to 10,000 licensed physicians, had only four physicians on the Board. The 900 osteopathic physicians in Florida have their own board, which contains seven members.

There are about 20,000 licensed medical doctors in Florida and only nine can serve on the Board at any one time.

A few local physicians, I was told, were upset that they had not been chosen by the governor. This was especially true in light of my appointment, since I had no prior connections with organized medicine in either my county or on the state level. Many doctors, I soon learned, had spent many years working for organized medicine in hope of one day receiving such an honor. One Dade County physician, a pathologist, wrote a letter to the Miami Herald rebuking the governor for not having appointed a pathologist to the Board. He believed that pathologists were particularly imbued with the knowledge that would make them good regulatory board members.

Almost all gubernatorial appointments to state regulatory boards are a form of political patronage.

This is a fact of political life. A governor, however can appoint ineffective cronies or highly qualified people. I believe that Governor Graham chose an excellent group of people to be on the Florida Medical Board in 1979. We were: a black surgeon from northwest Florida; two Jewish physicians from Miami; a Cuban-American family physician from Miami; a Cuban-American Harvard Law educated public member from Miami; a black female law student from Tallahassee; a white female pediatric allergist from Broward County; and four white Anglo-Saxon male physicians from four other areas of the state. All of us had some connection with the governor's successful bid for the statehouse 11 months before. Our appointments came at a very crucial time for medicine in Florida.

Crucial times • In the winter of 1979, the Miami Herald had published a devastating series of ten articles about dangerous doctors in Florida. The articles contended that many incompetent doctors were allowed to continue to practice because of an effete state medical disciplinary system. The series graphically documented cases of rape, murder, and grand larceny perpetrated by licensed Florida physicians against their helpless patients. The series caused public outrage, and the Herald won a Pulitzer Prize for it. Considerable public pressure was placed on the legislature to reform the state's medical disciplinary system.

Another important event for physicians in Florida was automatic termination of the Medical Practice Act in accordance with the state's Sunset Law. This law requires that all state regulatory boards and their governing legislation be terminated periodically. This occurs about every five years and forces the legislature to reevaluate the board's effectiveness prior to writing new legislation. The Florida Legislature in 1979, in response to public lobbying efforts, completely reorganized the state's professional regulatory system. Great powers were given to the Department of Professional Regulation, and it was placed in control of all 26 regulatory boards, including medicine. The super Department now had regulatory authority to both grant licenses and to discipline some 750,000 professional licensees in the state. The legislature also rewrote the medical law to make it one of the strictest in this country.

Under the prior law, the nine physicians and one public member of the Medical Board had almost complete control over medical licensing, examination, and discipline. A member of the Board could receive complaints and initiate investigations. All investigators were employed and controlled by the Board itself. Investigative reports were presented to several Board members who comprised the Probable Cause Panel. A Board member was assigned to each disciplinary case as the Hearing Officer at official administrative hearings to determine verdict and disposition. Members also prepared and administered the state's medical licensing examination twice a year. Florida began using the FLEX examination in 1979.

The old Medical Board had been given power to serve as investigator, judge, and jury, in all cases involving the alleged misconduct of fellow physicians. Such complete power fostered criticism that the Board was ineffective in handling disciplinary problems. There were also rumors and innuendos that members were susceptible to bribes and other improprieties. The public and the legislature could no longer tolerate such complete authority. The new law shifted power into the hands of the Department, its attorneys and civil servants.

Many physicians and medical organizations opposed the changes; however, the present system appears to be functioning well. A Wall Street Journal report in May 1981 referred to the Florida Board of Medical Examiners as one of the most effective in the nation. We had, the newspaper article stated, revoked or accepted the relinquishment of more medical licenses in one year than the previous board had accomplished in the prior ten years. The number of license revocations, however, is not the sole determinant of a medical licensing and disciplinary board's effectiveness. We have tried to be effective but humane in dealing with physicians who have been accused of violating the state law.

A Wall Street Journal report in May 1981 referred to the Florida Board of Medical Examiners as one of the most effective in the nation.

Present system • Under the present system specially trained analysts handle all complaints for the entire Department of Professional Regulation. A toll free telephone number is provided to complainants who have the option of remaining confidential. If the complaint has merit, and a violation of the law seems evident, the analyst refers the complaint to an attorney for the Department who verifies it before initiating an investigation. When the new law first came into effect, the Department allowed investigators to be shared by various regulatory boards. At present, investigators are assigned to the Medical Board, and we are given the best ones.

After the investigation is completed, the material is presented to two Board members who serve as the probable cause panel. Membership on

the panel changes about once a year. The panel reviews the reports to determine if probable cause exists that the law has been violated. The panel may agree with the Department's recommendation for probable cause, or it may differ and have the final word. All complaints and investigative material are confidential until ten days after probable cause has been found; then an administrative complaint is filed which becomes public information. If there is no probable cause, the material and complaint always remain confidential. Florida has a Sunshine Law which forces all government activities into public view.

The administrative complaint against a medical licensee culminates in an administrative hearing. The hearing officer is an attorney from the Florida Division of Administrative Hearings. The plaintiff is the Department of Professional Regulation, and the accused physician is the respondent. The hearing officer listens to all witnesses and testimony and to arguments from plaintiff's and defendant's counsel. He then proposes a verdict and sentence based upon his interpretation of the medical law.

Some months later, the hearing officer's recommended order is presented to the full Board of Medical Examiners. We may agree with the hearing officer's interpretation of the law and recommended sentence, or we may vote to mete out a less severe penalty than the one recommended. If we choose to offer a more severe penalty, we must review the entire written testimony of the administrative hearing. In most cases we only review a summary of the hearing and other pertinent material.

The accused physician has several available options. When a complaint is first filed, he may elect to participate in an informal hearing and try to agree to a stipulation with the Department. The stipulation must ultimately be accepted or rejected by the Medical Board. Informal hearings save months of anxiety for many physicians who realize they have committed some error. They also save thousands of dollars in legal costs.

Some physicians, who realize that they have been discovered doing wrong, may immediately relinquish their license and move to another state where they hold a valid license. They do so in hope of avoiding disciplinary action in Florida and in their new state. They also can accurately state that their medical license has never been revoked. Florida, and all other states, participate with the Federation of State Medical Boards in sharing disciplinary action information.

The only greater authority than the Medical Board in matters of medical discipline is the District Court of Appeals. Physicians who have had their license suspended or revoked attempt, at times, to have that license reinstated by the courts. The courts may order an injunction and reinstate the license very quickly, or it may take months for the matter to be heard. There are numerous instances where a hearing officer and the Medical Board agreed that a physician's violations were worthy of having his license suspended only to have that license reinstated by an attorney's ability to sway the appeals court justices.

The only greater authority than the Medical Board in matters of medical discipline is the District Court of Appeals.

Duties • Despite the fact that many of the Medical Board's duties have been usurped by the Department of Professional Regulation's staff, there is still a tremendous amount of work. We meet regularly six times a year. Quarterly meetings usually are Friday through Sunday and average about eight to 12 hours each day. The other two meetings last only two days. The preparation for each meeting usually requires about six to eight hours of reading time for the extensive number of reports and files.

Each of the Medical Board members also has other responsibilities. The two members on the Probable Cause Panel meet about once every six to eight weeks and review about 125 investigative reports each time. This requires considerable reading before the meeting, which lasts about three or four hours. The Board Chairman, who is alternated each year, appoints this committee, and tries to have members from the same city so that traveling is at a minimum.

Three members of the Board serve on the Joint Committee for Advanced Nursing Practice. I have been on this committee for the past three years and we meet several times a year to discuss additional medical acts that nurse practitioners are requesting authority to perform. This committee was created in the Nurse Practice Act by the legislature and is composed of three Medical Board members; three Nursing Board members; and the Secretary of the Department of Professional Regulation, or a designate. There are many highly charged and emotional issues involving the practice by nurse practitioners, and the meetings of this committee are full of emotion and tension.

Three members of the Board serve on the Impaired Physician's Advisory Committee. We meet about once a month, usually in Tampa, with a representative of the Florida Medical Association, Secretary of the Department of Professional Regulation or his designate, and several other health professional groups that are interested in this subject.

We are planning to formulate a policy regarding sick doctors; those addicted to alcohol or other substances, so that they can be treated confidentially before they harm themselves or their patients and before the Board is forced to take disciplinary action.

The Physician's Assistant Advisory Committee meets about every six to eight weeks to discuss and review applications of physicians and physician's assistants for certification. Three Board members serve on this Committee with several physician's assistants and other knowledgeable physicians and educators. They act on all applicants and forward their recommendations to the full Medical Board which has the final say.

Three Board members meet about two or three times each year with a representative of each of the three medical schools in Florida to discuss licensure of foreign medical graduates in our state. Of particular concern have been the large number of U.S. citizens who are studying at so-called offshore proprietary medical schools in the Caribbean area. Florida, as well as California and New York, is getting many of these graduates, who are seeking licensure and postgraduate education. This is a sticky political issue. More than 25% of these students are children of physicians who were unable to gain admission to U.S. accredited medical schools. An attempt is being made at the national level to establish an accrediting process for all foreign medical schools similar to accreditation of U.S. and Canadian schools.

Three members of the Medical Board meet several times each year with three members of the Florida Board of Pharmacy to discuss the state's negative formulary. This is a list, which presently contains 12 drugs, of medications which cannot be substituted by the pharmacist. A generic substitution law in Florida allows pharmacists to substitute a less expensive medication for a brand name except in cases where the physician has written "medically necessary" on the prescription in his own hand, or in those cases where the medication prescribed is on the negative formulary list. This committee evaluates requests by drug companies to either add or remove drugs from the list. The members forward their recommendations to a joint meeting of the full Boards of Medicine and Pharmacy who have the legislative authority to alter the negative formulary. These meetings are intense, and drug lobbiests mount an aggressive campaign to get the committee to agree with their view. It is a major battle. We employ pharmaceutical experts from the University of Florida to advise us before making important decisions.

The board voted to approve the creation of a newsletter to advise medical licensees in our state about the medical laws; rule changes; and about disciplinary actions that the board has taken against the medical licensees. I initiated the activity to develop the newsletter and I am presently the editor, writing the articles which appear there quarterly.

The Board or individual members are occasionally defendants in lawsuits filed by unhappy physicians or other medical practitioners. When we are named as defendants in a civil suit, we must appear at scheduled depositions called by the plaintiffs attorneys. These depositions occur about twice a year and last about two hours each time.

The Board is also responsible for licensing physical and occupational therapists and several members of the Board serve on a regulatory committee with members of those professions. We also have influence over the Board of Massage and must approve procedures that are requested.

Conclusion ● I believe a position on the Board was offered me because I had shown interest in the ethical dilemmas of modern medical practice. I had demonstrated my interest by writing articles on government intervention and other matters. A professional colleague recommended me to the governor and I am indebted to both of them. I have been permitted to enter into the realm of medicine and the law.

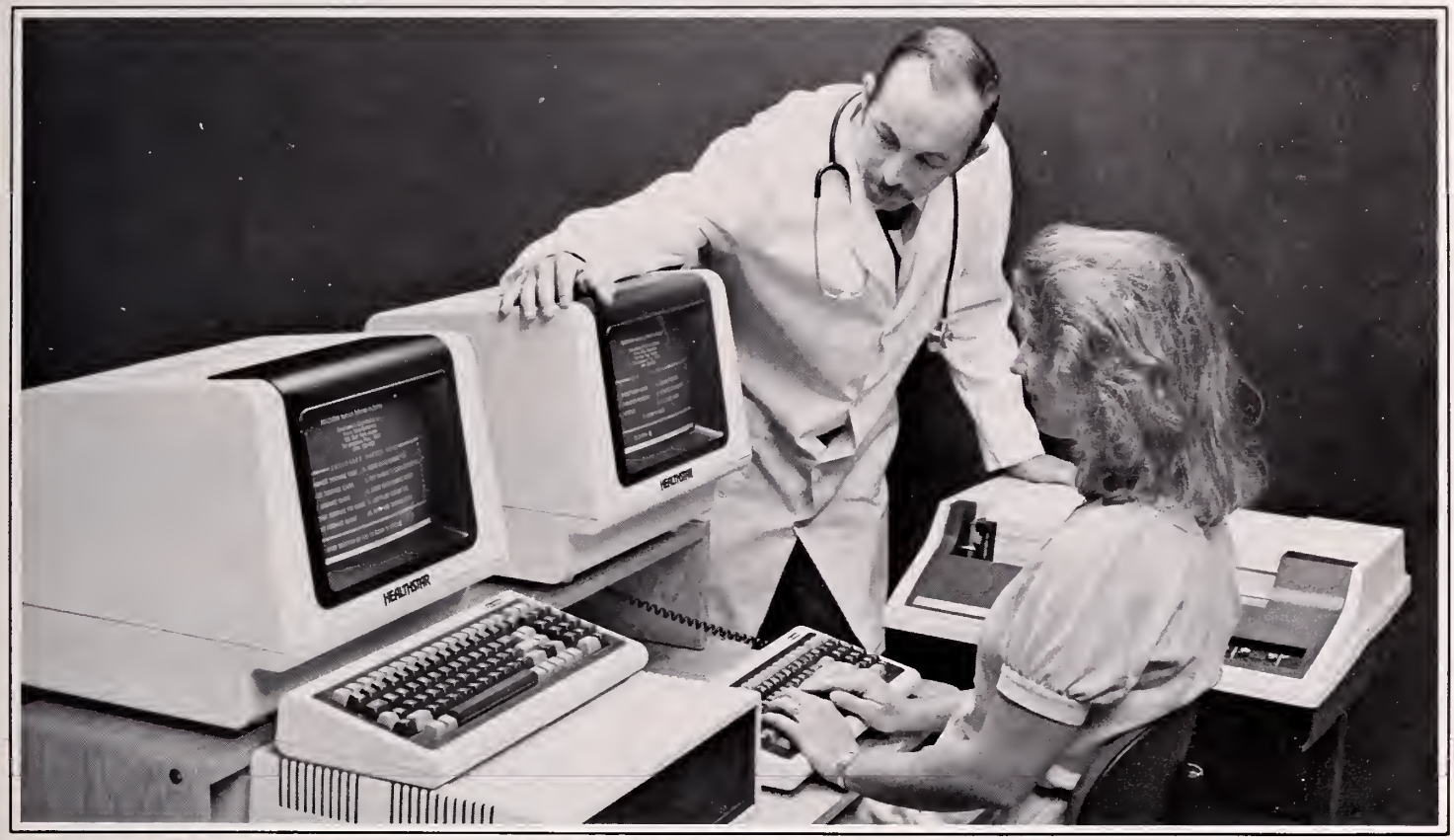
As Board members we see honest physicians who have allowed themselves momentary lapses in judgment and competence. We see dishonest and criminal physicians, the alcoholics, drug addicts, and sex offenders, who often cannot comprehend the gravity of their offense nor the reason disciplinary action has been taken against them. Their intellect cannot rise above the unhappiness of their soul's inner conflicts.

The Board represents a mandated disciplinary and licensing body that must make as certain as is humanly possible that only honest and competent physicians are allowed to practice. We have been challenged by the legislature to protect the health and safety of our citizens. The presence of nine physicians on the Board allows us to try and understand the anxieties and perplexing dilemmas that other physicians fall prey to.

It is easy to become haughty and arrogant when sitting in judgment of others. On the other hand, it is easy to identify so much with the accused physician, that discipline is not maintained at a high enough level to protect the public. We all must acknowledge the statistics that from 3% to 5% of physicians are either incompetent, corrupt, or disabled from substance abuse. They must be removed by the disciplinary system for our patients' benefit, and for our own.

● Dr. Feinstein, 3661 South Miami Avenue, Suite 902, Miami 33133.

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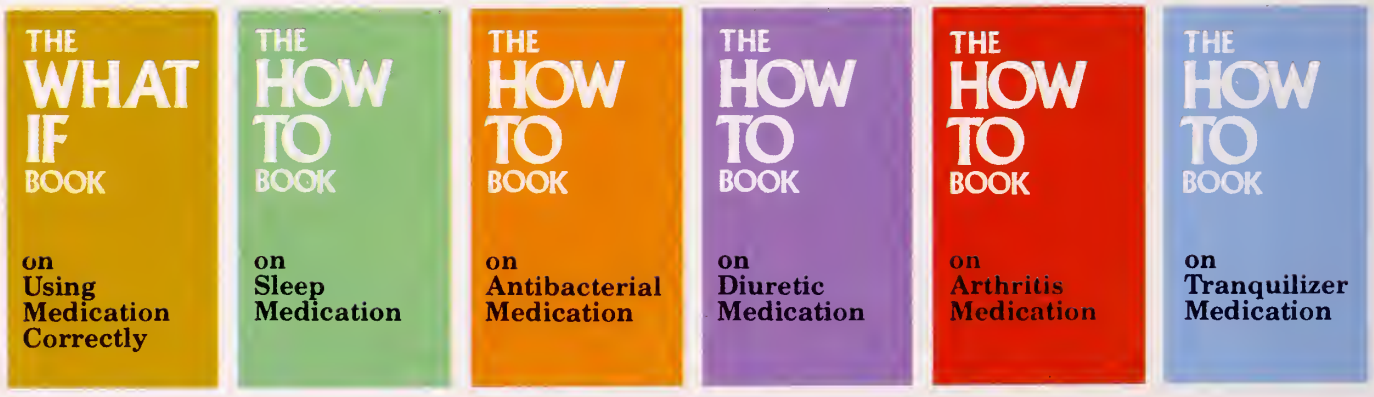
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NOTES & NEWS

Dr. Mahan appointed state director of maternal and child health

Dr. Charles S. Mahan, professor of obstetrics and gynecology at the University of Florida's College of Medicine, has been appointed "State Director of Maternal and Child Health" within the Health Programs Office of the State Department of Health and Rehabilitative Services (HRS).



Dr. Mahan

Dr. Mahan will assume the administration responsibilities in January 1983, while retaining academic affiliation with the University of Florida. He will continue as chief of the Division of Ambulatory Care in UF's Department of OB-GYN which includes direction of the federally-funded Maternal and Infant Care (MIC) project, family planning services and the food supplement program for Women, Infants, and Children (WIC) now reaching residents of 12 counties in North Central Florida. Also under his direction is a state and federally-supported Teenage Pregnancy Team project which currently assists some 150 pregnant teenagers (medically high-risk patients) annually in Alachua County.

USF Dean's Awards Dinner

The Third Annual University of South Florida College of Medicine Dean's Awards Dinner took place Friday, November 19, at the Tampa Yacht and Country Club and was hosted by Dean Andor Szentivanyi.

Recipient of the Founder's Award was John Melendi, Assistant Director of the USF Medical Center, Director of Administration and a charter member of the College of Medicine staff.

The Distinguished Professor Award was presented to Robert V. Farese, M.D., Professor of Internal Medicine and Associate Chief of Staff for research at the James A. Haley Veterans Administration Hospital. Dr. Farese's major contributions are in the area of endocrinology and metabolism.

Professor Joseph Cory, Ph.D., received the Distinguished Scientist Award for his contributions in cancer research. Dr. Cory is Chairman of the Department of Bio-chemistry and a charter member of the faculty.

The award for Distinguished Service was presented to Dr. William C. Edwards, Professor of Ophthalmology and the founding chairman of that department, who was recognized for his special contribution to the college. His son, William Edwards Jr., accepted the award on behalf of his father.

Dr. Mullen appointed to council of NIH

Dr. Sanford A. Mullen, president and medical director of the Jacksonville Blood Bank has been appointed to a four-year term on the National Heart, Lung and Blood Advisory Council of the National Institutes of Health. The appointment was made by Richard S. Schweiker, U.S. Secretary of Health and Human Services. Dr. Mullen is immediate past president of the Florida Medical Association.

Dr. Talbert elected to ACS Board of Governors



Dr. Talbert

Dr. James L. Talbert, professor and chief of pediatric surgery at the University of Florida's College of Medicine, is the newly elected secretary to the Board of Governors of the American College of Surgeons (ACS), the world's largest surgical society with more than 46,000 members. In addition to assuming the secretary's position, Dr. Talbert has been reelected to a three-year term as "Governor-at-large," representing the three Florida chapters of ACS. He also serves on the executive committee of the 160-member Board of Governors, whose primary purpose is to provide communications link between the fellowship and the administration of the College.

PLI UPDATE

Wrongful Birth

We continue to receive many inquiries concerning physician liability in cases in which a vasectomy or tubal ligation fails and a pregnancy results. Recent case law has developed which in large part clarifies the extent of physician liability in these cases and establishes a measure of damages to be applied in instances in which recovery is permitted. In dealing with these cases the courts have drawn a distinction between "wrongful life" and "wrongful birth" actions. "Wrongful life" has been defined as the child's cause of action for having been born, and "wrongful birth" as the parent's cause of action for the expense of caring for the child.

The wrongful life cases that have been brought on behalf of children have fallen into three major categories: (1) actions brought by illegitimates; (2) actions brought by unwanted children who were born as the result of a failed sterilization or abortion; and (3) actions brought by a child that was born deformed as a result of a failure to diagnose and/or inform his parents of an inheritable disease. To date, the courts have disallowed each category of cases. Thus, Florida law does not permit a wrongful life case to be brought on behalf of a child, regardless of whether it is healthy or deformed.

As to "wrongful birth" actions, the courts have held that the parents of a child have a cause of action sounding in negligence against a physician for performing a negligent vasectomy, sterilization, or abortion which results in the birth of an unwanted child. Additionally, the courts have allowed lawsuits based upon the alleged negligence of a physician or laboratory in failing to properly diagnose and inform the parents of the impending birth of a defective child, thus giving them the choice to terminate the pregnancy. It should be stressed, however, that wrongful birth actions are like any other medical malpractice action in that in order for the plaintiffs to recover they must prove that the physician defendent was negligent in his treatment and that the physician's negligence was the proximate cause of the alleged injury. No recovery is permitted if the "wrongful birth" was not the result of a breach of the standard of care on behalf of the physician.

As to damages recoverable by the parents in these actions, it has been held that the recoverable items of damages are much the same as any other medical negligence action, i.e., the plaintiffs can recover for such things as medical expenses, lost wages, pain and suffering caused by the undesired pregnancy and the process of childbirth. However, Florida Courts have been consistent in holding that the cost of raising an unwanted, but otherwise healthy child, is not recoverable. Disallowance of this element of damages is based upon the belief that the monetary value of a normal child's services, companionship and support to the parents more than offsets whatever rearing expenses may be incurred by the parents in raising such a child. Secondly, it is thought that the payment of normal expenses necessary to raise a child to majority is the sole legal obligation of the parents and in performing that duty it can not be said that the parents have sustained any damages. The courts have, accordingly, been unwilling to deviate from this established law so as to exempt parents of their legal obligation to support their children regardless of whether a physician has performed a negligent vasectomy or some other similar negligent medical service which eventually led to the birth of unwanted children. The child is still the child of the parents, not the physician, and the courts have held that it is the parents legal obligation, not the physician's, to support the child. There is, however, a limited exception to the general bar against rearing expense damages in cases of this nature. Where the child born has substantial mental or physical defects, the negligent physician will be liable in damages for the special medical and educational expenses, as opposed to normal rearing costs, associated with raising such a child to majority, which in Florida is age 18.

Prepared and submitted by Anthony J. McNicholas III, J.D., Associate Legal Counsel, Professional Insurance Management Co. (PIMCO), Jacksonville, Florida.

DEAN'S MESSAGE

Accreditation = quality

"The soul takes nothing with her to the other world but her education and culture . . ."

Plato (c. 428-348 B.C.)

The development of medical education in the United States has progressed remarkably since the organization of the Association of American Medical Colleges (AAMC) in 1876 with 22 institutional members. The first recommendations for medical education of the Association were:

1. Discontinue the issuance of diplomas without names.
2. Three courses of lecture of at least 20 weeks each.

In 1877, with only 15 members, the recommendation to extend the annual terms to six months for three years was adopted. This resulted in the demise

of the Association because the schools could not conform to the three-year rule. From 1882 until 1890, there was no quality review body of the nation's medical schools which had grown in number to 66. In 1890, a meeting was held by the schools to formalize a graded curriculum, examinations, English language requirements, laboratory instruction, and again, the three-year requirement. Inspection of schools began in 1903.

As recently as 1905, the requirements for M.D. candidates in the membership schools of the AAMC were adopted as follows:

1. High school diploma or its equivalent.
2. Examinations.
3. Four-year curriculum of 4,000 hours.

That year, the national organization of state medical boards adopted the same standards.

Almost simultaneously, the American Medical Association (AMA) formed the Council on Medical Education and Hospitals.

Abraham Flexner's survey of 148 medical schools published in 1910 revealed that 30 of the 50 AAMC members were not in compliance with the AAMC minimal standards! Subsequent to his report, which was commissioned by the Carnegie Foundation, many medical schools closed and others became two-year schools.

In 1913, historic an event occured. The AAMC and the AMA acted jointly to require one year of college before students could enter medical school. Six years later, the AAMC and AMA began joint inspection of medical schools. Only in 1942 was this productive relationship formalized in the establishment of the Liaison Committee on Medical Education (LCME). Since then, the cooperation and mutually supportive roles of the AAMC and the AMA have resulted in a superb quality control mechanism for undergraduate medical education by a unified system of accreditation.

There are now 127 medical schools that are accredited in the United States, including Puerto Rico. All of these schools have met minimal standards which are constantly under review by the LCME, AAMC, and AMA. The long-standing spirit of cooperation and the sharing of mutual goals between the two organizations are synergistic, resulting in the highest quality of medical education to be found anywhere in the world. Therefore, from the dedication and cooperation of the AAMC and the AMA, the public is benefited and quality is assured through accreditation.

William B. Deal, M.D.
Dean, College of Medicine
Associate Vice President
for Clinical Affairs
University of Florida
Gainesville, Florida 32610

(References upon request)

WORTH REPEATING

The effects of increased professional liability insurance premiums on health care in Dade County

Editor's Note: Dr. Schild is Chairman, Dade County Medical Society Professional Liability Committee and Ms. Runyan is Director, Membership Services for DCMS.

The documentation which follows was presented to the Medical Malpractice Insurance Council on September 9 to support the DCMA's position that immediate remedial measures are needed to reduce the current, escalating professional liability insurance crisis. The Council is charged with making recommendations to Insurance Commissioner Bill Gunter who, in turn, has been asked to present his recommendations to the Governor.

The medical professional liability insurance market has experienced drastic changes in the last decade. Increased numbers of lawsuits against physicians and correspondingly increased liability insurance premiums have affected the cost and availability of health care.[1] This is especially true in Dade County, Florida, where the number and severity of lawsuits and insurance premiums have skyrocketed.[2, 3]

The Dade County Medical Association, in an attempt to examine the range of consequences of rapidly rising professional liability insurance premiums, recently completed a survey of its members to ascertain the extent of the professional liability crisis in Dade County.

While the DCMA is, of course, interested in the effects of increased malpractice premiums on a physician's income, the Association's primary concern is health care in the community. If the cost of health care in Dade County increases, and the availability of health care decreases, the consumers of health care will be seriously affected. Kathryn M. Langwell and Jack L. Werner describe this phenomenon:

> It appears that the professional liability crisis has had an affect on both physicians and on consumers of physicians' services...Consumers of medical services, therefore, have been faced with reduced availability of care, as some physicians refuse to accept certain cases with perceived high risk of liability claim.[4]

The Dade County Medical Association realized that statistical data were needed in order to ascertain the effects or increased professional liability insurance premiums on health care in the community. One way of obtaining such data was to survey its

Table 1. — General Responses

Number	Responses	Percentage
787	1. Increased fees	58.25
337	2. Lowered coverage limits	24.94
276	3. Seriously considering moving from Dade County	20.43
229	4. Limited practice procedures to lower classification	16.95
120	5. No longer carry professional liability insurance	8.88
82	6. Not affected - premiums paid by government or other institution	6.07
30	7. Taken early retirement	2.22

Table 2. — Additional Comments

Number	Comment	Percentage
101	1. Have made no changes	7.48
54	2. Increased defensive medicine	4.00
35	3. Avoid risky procedures	2.59
35	4. Planning early retirement	2.59
31	5. No longer Patient's Compensation Fund member	2.29
19	6. Increased coverage limits	1.41
14	7. Absorbed increased cost in office expense	1.04
125	8. Other	9.25

members to determine what actions, if any, they have undertaken as a result of increased malpractice premiums.

Method • On August 17, 1982, the Association mailed questionnaires to 2,881 of its 3,131 members (92%). Medical students, interns, residents and retired physicians were excluded from the sample space because these groups are not generally purchasers of professional liability insurance. Members were asked to complete the survey form and to return it, anonymously, in an enclosed response envelope to the DCMA offices, where the forms were numbered, coded and the data were entered into a computer.

The survey form requested the physician to list his medical specialty and age, and to answer one question: "Which of the following alternatives have you instituted *as a direct result of the increased professional liability premiums?*" The respondent was encouraged to check as many of the options as were appropriate to his situation. Space for comments was also provided.

Data • Of the total sampled population of 2,881 physicians, 1,351 responded. This 46.9% response rate provides a more than adequate sample space and speaks to the validity of the statistics. The median age of the responding physician was 50.2 years, indi-

Table 3. — Response by Age

Response		25-35 (100)	36-45 (373)	46-55 (421)	56-65 (299)	66-75 (110)	Over 75 (27)	Total[5] (1,351)
1. Increased Fees	#	53	236	256	174	52	7	787
	%	53.00	63.27	60.81	58.19	47.17	25.93	58.25
2. Lowered Coverage Limits	#	44	138	88	53	10	1	337
	%	44.00	37.00	20.90	17.73	9.09	3.70	24.94
3. Seriously considering moving from Dade County	#	13	65	107	61	19	5	276
	%	13.00	17.43	25.42	20.40	17.27	18.52	20.43
4. Limited practice procedures to lower classification	#	6	37	73	75	28	7	229
	%	6.00	9.92	17.34	25.08	25.45	25.93	16.95
5. No longer carry liability insurance	#	0	17	33	39	18	9	120
	%	0	4.04	7.84	13.04	16.36	33.33	8.88
6. Not affected — premiums paid by institution	#	7	18	30	19	6	0	82
	%	7.00	4.83	7.13	6.35	5.45	0	6.07
7. Taken early retirement	#	0	0	5	5	9	9	30
	%	0	0	1.19	1.67	8.18	33.33	2.22

Table 3 provides a breakdown of the responses by age group. Significantly, physicians in the age groups with the highest expected patient load replied with above average frequency to the most common responses.

Table 4. — Response by Specialty

Legend

1. Increased fees.
2. Lowered coverage limits.
3. Seriously considering moving from Dade County.
4. Limited practice procedures.
5. No longer carry professional liability insurance.
6. Premium paid by institution.
7. Taken early retirement.

Specialty		#1	#2	#3	#4	#5	#6	#7
Anesthesiology (58)	#	41	28	13	2	1	7	0
	%	70.1	48.3	22.4	3.5	1.7	12.1	0
Cardiology (45)	#	27	12	5	5	2	1	0
	%	60.0	26.7	11.1	11.1	4.4	2.2	0
Dermatology (33)	#	16	8	3	10	0	0	1
	%	48.5	24.4	9.1	30.3	0	0	3.0
Family Practice (102)	#	52	15	24	35	11	5	2
	%	51.0	14.7	23.5	34.3	10.8	4.9	2.0
Gastroenterology (24)	#	18	7	2	1	0	3	1
	%	75.0	29.2	8.3	4.2	0	12.5	4.2
General Practice (77)	#	27	5	18	24	20	3	2
	%	35.1	6.5	23.4	31.2	26.0	3.9	2.6
General Surgery (89)	#	58	26	27	10	22	10	3
	%	65.2	29.2	30.3	11.2	24.7	11.2	3.4
Gynecology (27)	#	18	10	6	12	5	0	1
	%	66.7	37.0	22.2	44.4	18.5	0	3.7
Internal Medicine (194)	#	118	27	37	24	9	9	4
	%	60.8	13.9	19.1	12.4	4.6	4.6	2.1
Obstetrics-Gynecology (73)	#	61	35	14	10	6	3	1
	%	83.6	47.9	19.2	13.7	8.2	4.1	1.4
Ophthalmology (57)	#	32	14	11	3	4	1	2
	%	56.1	24.6	19.3	5.3	7.0	1.8	3.5
Orthopedic Surgery (70)	#	45	33	13	14	7	3	1
	%	64.3	47.1	18.6	20.0	10.0	4.3	1.4
Otorhinolaryngology (34)	#	23	16	14	10	6	0	0
	%	67.6	47.1	41.2	29.4	17.6	0	0
Psychiatry (65)	#	27	5	16	19	2	5	0
	%	41.5	7.7	21.5	29.2	3.1	7.7	0
Pediatrics (65)	#	37	7	9	15	2	8	2
	%	56.9	10.8	13.8	23.1	3.1	12.3	3.1
Plastic Surgery (32)	#	26	14	7	2	0	1	0
	%	81.2	43.8	21.9	6.2	6.2	0	0
Pathology (26)	#	6	2	4	2	1	7	0
	%	23.1	7.7	15.4	7.7	3.8	26.9	0
Radiology (26)	#	17	2	8	6	1	1	2
	%	65.4	7.7	30.8	23.1	3.8	3.8	7.7
Urology (39)	#	29	16	8	4	2	0	0
	%	74.4	41.0	20.5	10.3	5.1	0	0

Table 4 lists responses by specialty. Only specialties with more than 20 responses are listed so that statistical validity is maintained.

cating that the average respondent was at the height of his most productive years. Indeed, 80.9% of the respondents were between the ages of 36 and 65.

Analysis • The most obvious conclusion from the data is that well over half of the physician-respondents have raised their fees as a direct result of increased professional liability insurance. Indeed, 83.66% of obstetrician/gynecologists who responded have increased their fees, and 81.2% of the plastic surgeon respondents have similarly raised their fees.

The cost of health care in Dade County will be seriously impacted when the majority of physicians raise their fees to meet the rising cost of malpractice insurance. Furthermore, 54 physicians replied that they have been forced to practice more and more defensive medicine, which means ordering more expensive tests, calling in more consultants and extending hospital stays. This, too, inflates the cost of health care.

Although many respondents indicated that they have lowered their coverage limits, this is not truly significant. Most of these physicians (84%) had unlimited coverage with the Florida Patient's Compensation Fund, and were required to reduce this coverage to a finite amount when the Fund raised its rates effective July 1, 1982.

Another serious implication is the possibility of reduced availability of health care in the community. Because 276 respondents indicated that they are seriously considering moving from Dade County, 229 indicated that they have limited their practice to reduce their insurance classification, and 30 have taken early retirement, it can be concluded that availability of health care will also be affected. Specifically, 41.2% of otorhinolaryngologist and 30.8% of radiologist respondents are seriously considering moving, and 44.4% of gynecologist and 34.3% of family practitioner respondents have limited their practices. It is also interesting to note that 35 physicians commented that they feel compelled to avoid high risk procedures. The same number commented that they, too, are planning an early retirement.

The Results • Is there a professional liability insurance crisis in Dade County? The data support that, indeed, a crisis does exist as a result of rapidly rising premiums.

Because physicians have had to increase their fees and practice medicine more defensively, the health care consumer in Dade County, his insurance company and his employer are being forced to foot the higher costs of health care. Because of soaring premiums, physicians are seriously considering moving from Dade County, limiting their practices, avoiding high risk procedures, and taking or planning early retirement. The result is that the availability of health care is being severly impaired.

These, then, are the effects of skyrocketing professional liability insurance premiums: an *increase* in the cost of health care and a *decrease* in the availability of health care in Dade County. The health care consumer is affected, and so is the physician. In the words of one respondent, "The joy of serving the public is fading fast".

References

1. K M Langwell, J. L Werner Regional Determinants of Professional Liability Claims, Journal of Health Politics, Policy and Law 5:3 (Fall) 1980
2. V B Astler Impact of Liability Insurance on Health Care Cost in Florida, JFMA 69 3 (March) 1982
3. Florida Patient's Compensation Fund Report, (August) 1982
4. K M Langwell, J L Werner Professional Liability Environment and Physicians' Responses, Medical Care 19 2 (February) 1981.
5. Number of responses will not equal total because a numbe r of respondents did not provide their ages

Reprinted from *Miami Medicine*, October 1982.

109th ANNUAL MEETING

Specialty societies planning outstanding programs for 109th Annual Meeting

The 109th Annual Meeting of the Florida Medical Association promises to offer some of the most exciting and valuable scientific sections ever presented. Make plans now to attend May 4-8, 1983 at the Diplomat Hotel, Hollywood, Florida.

SECTION ON ALLERGY AND IMMUNOLOGY

(Co-sponsored by Florida Allergy and Immunology Society)
Saturday, May 7, 1983—8:25 a.m. to 12:45 p.m.
Frederick L. Bloom, M.D. Sarasota
Program Chairman

"Pharmacokinetics of Theophylline Part II," Saber Samaan, Ph.D., Assistant Professor of Medicine, Division of Allergy and Clinical Immunology; University of South Florida College of Medicine, Tampa.

"Red Tide (Ptychodiscus Brevis) Toxin; A Possible New Asthma-Triggering Mechanism," Richard F. Lockey, M.D., Director of Allergy and Immunology, V.A. Hospital; Associate Professor, Division of Allergy and Immunology, University of South Florida College of Medicine, Tampa.

"Drug Allergy: Assessment," Timothy Sullivan, M.D., Chief Allergy Section, Department Internal Medicine, University of Texas Health Science Center, Dallas, Texas.

"Aeroallergen Survey of Tampa Bay Florida, Three Year Study," Gerry Bucholtz, M.D., Assistant Professor, Division of Allergy and Immunology, V.A. Hospital, University of South Florida College of Medicine, Tampa.

"Significance of Florida West Coast Aeroallergens," Mary Jelks, M.D.; Chairperson, Pollen and Mold Committee, American Academy of Allergy and Immunology; Sarasota.

"Clinical Problems Secondary to T-cell Dysfunction," R. Lawrence Siegel, M.D., Ph.D., Department of Pediatrics and Medical Microbiology-Immunology, University of South Florida College of Medicine, Tampa.

"Drug Allergy: Management," Timothy Sullivan, M.D., Associate Professor, Chief Allergy Section, Department Internal Medicine, University of Texas Health Science Center, Dallas, Texas.

Educational Objectives:

I. *Target Group:*
The educational program of the Florida Allergy and Immunology Society is open to all physicians but over the past years has been predominately attended by members of this society and other physicians having an interest in this area. The discussion is targeted primarily to allergists and clinical immunologists, although the information is valuable to general physicians, family practitioners, pediatricians, internists, pulmonary specialists, and otorhinolaryngologists amongst the other specialties.

II. *Educational Areas:*
A. Basic science/immunology:
Our programs in the past and this year will present new information and new understandings in the basic science of immunologic mechanisims in this relatively new and rapidly exploding field, how these new understandings relate to some old clinical problems for which mechanisims were unknown, and to new clinical problems such as the epidemic of tumors and unusual infections now occurring amongst select populations.
B. Clinical Allergy:
Reports of studies being done at Florida medical schools further defining which aeroallergens are of importance to patients with allergic disease here in Florida will be presented. This has great clinical relevance and is thought to be very valuable by the attendees each year, and does influence the way in which each physician practices. This is one area in which physicians gain new insights which affect the day to day practice of clinical allergy.

III. *Educational Processes:*
A. Diadactic lectures by recognized experts in these various fields.
B Questions and answers following each lecture so that participants can ask specific questions of these experts.
C. Panel discussion in which the experts will discuss and/or debate or respond to ideas or questions from other speakers, or from those in the audience.
D. There will be a coffee break for free time for further in-depth discussion in small groups which often is the most valuable part of these meetings.

SECTION ON COLON AND RECTAL SURGEONS

(Co-sponsored by Florida Society Colon and Rectal Surgery)
Friday, May 6—1:30 p.m. to 5:30 p.m.
Shed Roberson, M.D., Ormond Beach
Program Chairman
"Colon and Rectal Surgery"

"Screening for Colo-Rectal Cancer"—William Ferrante, M.D., Chairman, Dept. of Gastroenterology, Ochsner Clinic, New Orleans, LA.

"Colonoscopy Update"—John Christie, M.D., South Miami, FL.

"Office Treatment of Hemorrhoids"—Harvey Shub, M.D., Orlando, FL.

"Hospital Treatment of Hemorrhoids"—Matthew Larkin, M.D., Miami, FL.

"Adjuvant Radiotherapy in Sphincter-saving Surgery for CA of Rectum"—Gerald Marks, M.D., Professor of Surgery; Jefferson Medical College, Philadelphia, PA.

"Proctologic Potpourri (panel)" Moderator-Shed Roberson, M.D.; Panel-Gerald Marks, M.D., Matthew Larkin, M.D., Harvey Shub, M.D., William Ferrante, M.D.

Education Objectives: To educate the colo-rectal surgeon on the various methods of diagnosing and treating anorectal disorders, screening for colo-rectal cancer, using colonoscopy and adjuvant treatment of carcinoma of the rectum with irradication.

At the completion of these lectures, the physician should possess a more complete understanding of the topics and be able to apply the principles in clinical practice.

SECTION ON CHEST MEDICINE

(Co-sponsored by Florida Chapter, American College of Chest Physicians, and Florida Thoracic Society)
Thursday, May 5—1:00 p.m. to 4:00 p.m.
Mark Snider, M.D., South Miami
Program Co-Chairman
"Pulmonary Vascular Disease"

"Recent Advances in the Treatment of Pulmonary Hypertension," Tahir Admed, M.D.

"Controversies in the Prevention and Treatment of Pulmonary Emboli," David Solomon, M.D.

"Interactions Between Respiration and Circulation," Robert A. Wise, M.D.

Education Objectives: The educational objective of this three lecture series is to provide both the pulmonary and non-pulmonary physician information on various forms of pulmonary vascular pathophysiology utilizing a progressively sophisticated information format. At the completion of the program the attending physicians should have sufficient knowledge to diagnose and manage, or at least understand the present state of the art in managing the patient with pulmonary vascular disease.

SECTION ON DERMATOLOGY

(Co-sponsored by Florida Society of Dermatology)
Friday, May 6—3:00 p.m. to 5:00 p.m. and
Saturday, May 7—9:00 a.m. to 12:30 p.m.
Phillip Frost, M.D., Miami
Program Chairman

"Dermatopathology-Cases of Special Interest" —Arkadi Rywlin, M.D., Director Pathology and Laboratory Medicine Services, Mount Sinai Medical Center of Greater Miami; George Ioannides, M.D. Professor of Pathology, University of Miami School of Medicine and Clinical Professor of Pathology, Emory University School of Medicine.

"Effects of Spironolactone on Hamster Sebaceous Glands"—Jeffrey Bowden, M.D., Mount Sinai Medical Center of Greater Miami.

"HLA Antigens in Elderly Men with Kaposi's Sarcoma"—Richard A. Johnson, M.D., Mount Sinai Medical Center of Greater Miami.

"Epidemic Kaposi's Sarcoma and AID (Part I)"—Marcus A. Conant, M.D., Assocate Professor of Dermatology, University of California School of Medicine, San Francisco, California.

"The Effects of Topically Administered Corticosteroids on the Response to UVB in Patients with Psoriasis"—Bernard Nusbaum, M.D., Mount Sinai Medical Center of Greater Miami.

"Topical Therapy with Corticosteroids"—Richard B. Stoughton, M.D., Professor of Dermatology, University of California School of Medicine, San Diego, California.

"Epidemic Kaposi's Sarcoma and AID (Part II)"—Marcus A. Conant, M.D.

"Lymph Node Metastases in Relation to the Histology of Primary Melanoma Leisons"—Arthur Weissmann, M.D., Mount Sinai Medical Center of Greater Miami.

Educational Objective: The objective of this session in dermatology is to provide the information necessary to recognize and care for patients with Kaposi's Sarcoma in the elderly and in the young homosexual population; to provide information concerning the proper diagnosis and prognosis of malignant melanoma lesions; to provide information on the proper use of corticosteroids in the therapy of psoriasis and other diseases; and, to explain the effects of certain drugs on these sebaceous glands.

SECTION ON ENDOCRINOLOGY

(Co-sponsored by Florida Endocrine Society)
Friday, May 6—8:00 a.m. to 10:45 a.m.
Edward B. Biederman, M.D., Ft. Lauderdale
Program Chairman

"Thyroid Update"

"Thyroid Function Tests"—Marguita Zakarija, M.D., Associate Professor of Medicine, University of Miami School of Medicine.

"Graves Disease"—J. Maxwell McKenzie, M.D., Professor of Medicine; Chairman, Department of Medicine; Chief, Division of Endocrinology & Metabolism, University of Miami School of Medicine.

"Thyroiditis"—Robert C. Farese, M.D., Professor of Medicine; Chief of Endocrinology, University of South Florida School of Medicine.

Educational Objective: To enable the General Practitioner or Internist to properly diagnose and treat patients with Grave's Disease and thyroiditis.

SECTION ON FAMILY MEDICINE

(Co-sponsored by Florida Academy of Family Physicians)
Thursday, May 5—1:30 p.m. to 4:30 p.m.
Jack E. Giddings, M.D., Jacksonville
Program Chairman

"Role of Family Physician in Sports Medicine"—Peter Indelicato, M.D., Team Physician University of Florida Athletic Association Assistant Professor & Director, Sports Medicine, Department of Orthopedics, University of Florida College of Medicine, Gainesville

"Working the Front End [Prevention]"—Joseph Brownholz, Ed.D. Associate Professor, Department of Health, Physician Education & Recreation, University of Miami, Miami.

"Management of Common Sports Injuries"—Dr. Peter Indelicato.

"The Exercise Prescription"—Dr. Joseph Brownholz.

Educational Objective: The Family Practice Section is designed to (1) provide information on the use of exercise, nutrition and lifestyle by the family physician in preventive patient care; (2) identify the role of the family physician in sports medicine; (3) update information on treatment of common sports injuries and; (4) provide practical lectures tailored so that material and topics presented are useful as well as interesting.

SECTION ON FAMILY MEDICINE AND INTERNAL MEDICINE

(Co-sponsored by Florida Academy of Family Physicians and Florida Society of Internal Medicine)
Friday, May 6—9:00 a.m. to 10:30 a.m.
Jack E. Giddings, M.D., Jacksonville and
Roy H. Behnke, M.D., Tampa
Program Co-Chairmen
Joint Session on Medico-economic Topic

"Health Care, Hospitals and Medicare"—M. Keith Weikel, Ph.D.

Educational Objective: The objective of this program is to examine the scope of relationships between hospitals and physicians in the future delivery of health care to the people of Florida.

SECTION ON GASTROENTEROLOGY AND NUCLEAR MEDICINE

(Co-sponsored by the Florida Gastroenterologic Society and the Florida Association of Nuclear Physicians)
Friday, May 6—8:00 a.m. to 10:45 a.m.
Howard Manten, M.D., Miami
Stephen P. Rosenthal, M.D., Miami
Program Chairmen

"Scientigraphic Localization of GI Bleeding"—S.P. Rosenthal, M.D.

"ERCP And PTC"—H.D. Manten, M.D.

"Hepatobiliary Scientigraphy"—R.S. Fisher, M.D.

"Dysphagia and Heartburn"—A.I. Rogers, M.D.

"Scientigraphic Evaluation of Esophageal, Gastroesophageal and Gastric Motor Function"—R.S. Fisher, M.D.

Educational Objective: The educational objective of this session is to enable Gastroenterologists, Internists, Surgeons and General Practitioners to understand the role of Radioisotope Imaging procedures in the evaluation of patients with Hepatobiliary Disease, Esophageal Dysfunction, Gastric Motility Abnormalities and Lower Gastrointestinal Bleeding. Endoscopic, Radiologic and Clinical Correlation will be provided. Physicians completing this program will have a working knowledge of the clinical relevance and the proper utilization of Esophageal, Gastroesophageal, Gastric and Hepatobiliary Radioisotope Imaging procedures.

SECTION ON INTERNAL MEDICINE

(Co-sponsored by the American College of Physicians, Florida Region and the Florida Society of Internal Medicine.)
Wednesday—May 4, 1983
1:00 to 4:15 P.M.
Roy H. Behnke, M.D., F.A.C.P., Tampa
Program Chairman

"Multidisciplinary Approach to the Critically Ill Medical Patient"

"Management and Assessment of the Respiratory Status"—Keith Chandler, M.D., Assistant Professor of Medicine, Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, University of South Florida College of Medicine.

"Assessment of the Cardiac Function"—Gene L. Colice, M.D., Assistant Professor of Medicine, Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, University of South Florida College of Medicine, and Director, Medical Intensive Care Unit, James A. Haley Veterans Administration Hospital, Tampa, Florida.

"Coagulation and Platelet Problems"—Hussain I. Saba, M.D., Associate Professor of Medicine and Director, Division of Hematology, Department of Internal Medicine, University of South Florida College of Medicine.

"Infections and Their Management"—John F. Breen, M.D., Clinical Assistant Professor of Medicine, Division of Infectious and Tropical Diseases, Department of Internal Medicine, University of South Florida College of Medicine.

Educational Objectives: The critically ill medical patient often poses such a myriad of problems of such complexity that no one physician is able to subserve all problems. Upon the completion of this course the physician-student should more clearly understand the major complications in such critically ill patients and

the kind of specialized expertise individual disciplines bring to that understanding. Included are the assessment of major systems and the heart and lungs, and diagnosis and management of derangements of these systems. Infection and coagulation disorders commonly encountered will be similarly assessed and their management outlined.

SECTION ON NEONATAL-PERINATOLOGY

(Co-sponsored by Florida Neonatal-Perinatal Society)
Thursday, May 5—1:30 p.m. to 4:15 p.m.
K.S. Kanarek, M.D., Tampa
Program Chairman

"Support for the Laboring Mother in Improving Neonatal Outcome"—Roberto Sosa, M.D., Director, Neonatal Regional Intensive Care Unit, All Children's Hospital, St. Petersburg, Florida.

"Development of a Neonatal Nurse Practitioner Program"—Donald Garrison, M.D., Assistant Professor of Pediatrics, Division of Neonatology, University of Florida College of Medicine, University Hospital, Jacksonville, Florida.

"Solace for Grieving Parents"—Patricia M. Lagrua, M.S.N., Clinical Specialist in Research Associate, Department of Neonatology, All Children's Hospital, St. Petersburg, Florida.

"Factors Influencing Developmental Outcome"—Susan Widmayer, Ph.D., Assistant Professor of Pediatrics and Psychology, University of Miami School of Medicine, Miami, Florida.

Educational Objective: The educational objective of this program is to acquaint the practicing physician involved in maternal and infant care with the allied health professional resources that are available. This information should assist the physician in managing the mother in labor and the ill neonate, in addition to counselling parents and assessing graduates of the Neonatal Intensive Care Unit.

SECTION ON NEUROSURGERY

(Co-sponsored by Florida Neurological Society and Florida Neurosurgical Society)
Donald Mellman, M.D., Tampa and
William Ertag, M.D., Naples
Program Chairmen
Saturday, May 7—9:00 a.m. to 11:30 a.m.

"Pathology of Aneurysms" Michael Norenberg, M.D., Professor of Neurology and Pathology, Director of Neuropathology, University of Miami School of Medicine, Miami, Florida.

"Radiology of Aneurysms"—F. Reed Murtagh, M.D., Clinical Assistant Professor of Radiology, University of South Florida College of Medicine, Tampa, Florida.

"Techniques of Aneurysm Surgery"—Ralph Rydall, M.D., Clinical Associate Professor of Neurosurgery, University of South Florida College of Medicine, Tampa, Florida.

"Complications of Aneurysm Surgery"—Larry Page, M.D., Professor of Neurosurgery, University of Miami School of Medicine, Miami, Florida.

"Current Concepts of Medical Management of Aneurysms"—Myron D. Ginsberg, M.D., Professor of Neurology, Director of the Cerebral Vascular Disease Research Center, University of Miami School of Medicine, Miami, Florida.

Educational Objective: The educational objective of this course is to enable the neurological specialist to learn and understand the latest concepts in the medical and surgical management of the patient with an intracranial aneurysm.

SECTION ON OCCUPATIONAL MEDICINE

(Co-sponsored by Florida Occupational Medical Association)
Friday, May 6—1:30 p.m. to 5:30 p.m.
Charles Fitzgerald, Jr., M.D., Winter Park
Program Chairman

"Why Work Matters"

"Health Screening and Wellness at Work"—Charles Fitzgerald, M.D., Prohealth Corporation, Winter Park, Florida.

"Benefits and Risks at Work"—Nick Alexiou, M.D., Chairman Occupational Medicine, University of South Florida, Tampa, Florida.

"Psychiatry and Psychology at Work"—Maurie Pressman, M.D., Medical Director, Horizon Hospital, Clearwater, Florida.

"Limitations and Opportunities at Work"—Van Brewster, M.D., Florida Power Corporation, St. Petersburg, Florida.

Educational Objectives: The educational objectives are to re-emphasize and demonstrate the important relationship between health and work and to demonstrate that participation in occupational health programs provides physicians distinct and unique opportunities not available in private settings.

Upon completion of this program, the physician will understand the opportunities available through occupational medicine and how to use this advantage in order to improve health care for employees under his supervision and his private patients.

SECTION ON PEDIATRIC CARDIOLOGY

(Co-sponsored by Florida Association of Pediatric Cardiology)
Saturday, May 7—8:00 a.m. to 11:30 a.m.
Arthur S. Raptoulis, M.D., Orlando
Program Chairman

"Update Pediatric Cardiology 1983"

"Recent Advances in Surgical Correction of Congenital Heart Disease"—George R. Daicoff, M.D., Clinical Professor of Surgery, University of South Florida School of Medicine.

"Pediatric Intensive Care"—Invasive and noninvasive hemodynamic monitoring. James A. Alexander, M.D.

"Cardiac Electrophysiologic Evaluation—Indications and Techniques"—Grace S. Wolff, M.D., Associate Professor of Pediatrics, Department of Pediatrics, University of Miami School of Medicine.

Educational Objectives: The first objective is to enable a general pediatrician to become acquainted with and understand the indications for surgical procedures utilized in Pediatric Cardiology. The second objective is to enable the general pediatrician, the pediatric cardiologist and/or a pediatric intensivist to become aware of new techniques in hemodynamic and noninvasive monitoring of pediatric patients in an intensive care setting. A third objective deals with invasively investigating supraventricular and ventricular dysrhythmias. This portion of the program will enable pediatric cardiologists to rationally avail themselves and their patients of the services currently available to them in the State of Florida for evaluation of these dysrhythmias. The general pediatrician will benefit in much the same way.

SECTION ON PHYSICAL MEDICINE AND REHABILITATION

(Co-sponsored by Florida Society of Physical Medicine and Rehabilitation)
Saturday, May 7—9:00 a.m. to 11:00 a.m.
Sterling H. Huntington, M.D., Boca Raton
Program Chairman

"Recent Advances and New Concepts in the Treatment of Stroke and Spinal Cord Injuries With Reference to Spasticity"—Arthur S. Abramson, M.D., Chairman, Department of Rehabilitation Medicine, Albert Einstein College of Medicine, New York City, New York.

Educational Objectives: This program will be aimed at physiciatrists in Florida as an update on some very new advances in the field of rehabilitation medicine, to enable each of us to apply the knowledge to their work in various hospitals throughout the state. This will be aimed mainly at the physiatrists rather than other groups and will be aimed basically at those, treating strokes and spinal cord injuries.

It should add to the existing literature and will include the most recent information from one of the leaders of this society in the United States and, in fact, the world.

SECTION ON RADIOLOGY

(Co-sponsored by Florida Radiological Society, Inc.)

Friday, May 6—1:00 p.m. to 4:00 p.m. and
Saturday, May 7—9:00 a.m. to 12:00 noon

Martin L. Silbiger, M.D., Tampa
Program Chairman

"New Techniques in Vascular and Neurologic Radiology"

Friday, May 6

Vascular Interventional Radiology

"Results of Renal Angioplasty: Case Selection and Long-Term Follow-up"—Peter Sones, M.D., Chief, Section of Angiography, Emory University Clinics and Emory University School of Medicine, Atlanta, Georgia.

"Ileofemoral Angioplasty: Techniques and Results"—Robert Schultz, M.D., Chief, Section of Angiography, Orlando Regional Medical Center, Orlando, Florida.

"Coronary Angioplasty: Case Selection and Results"— Peter Sones, M.D.

Saturday, May 7

Neuroradiologic Techniques

"Percutaneous Biopsy Techniques and Spinal Cord Puncture"—Robert Quencer, M.D., Director, Division of Neuroradiology, Department of Radiology, Jackson Memoral Hospital and University of Miami School of Medicine, Miami, Florida.

"High Resolution Computerized Tomography of the Orbit"—Robert Quencer, M.D.

"Radiologic Evaluation of Facet Disease and Facet Injection Techniques in Focal Spinal Pain Syndromes"—Reed Murtagh, M.D., Director, Section of Neuroradiology, Tampa General Hospital and Clinical Assistant Professor, Department of Radiology, University of South Florida College of Medicine, Tampa, Florida.

Educational Objectives: With the recent development of new techniques in radiology it is imperative that the practicing radiologist knows the indications, contradictions, complications and results of these methods.

At the completion of this course the radiologist should understand which patients will benefit from interventional radiologic procedures and which patients would be better treated with other established medical and surgical techniques.

SECTION ON PREVENTIVE MEDICINE

(Co-sponsored by Florida Society of Clinical Oncologists)

Thursday, May 5—1:30 to 5:30 p.m.

E. Charlton Prather, M.D., Tallahassee
Program Chairman

"Programming for Pregnancy by Local Health Departments"—Stephen H. King, M.D., Staff Director, Health Program Office and State Health Officer.

"A Prenatal Protocol for Local Health Departments"—June M. Atkinson, M.D., M.P.H., Director, Lake County Health Department.

"The Hepatitis and Other New Vaccines—Their Use and Abuse"—Jeffrey J. Sacks, M.D., M.P.H. State Epidemiologist.

"Hospitals and Health Departments in Epidemic Control"—Lucille B. Emberton, R.N., M.A., Nurse Epidermiologist, University Community Hospital, Tampa, Florida.

"Cervical Actinomycosis"—Betty J. Vaughn, M.D., Clinical Director, Orange County Health Department.

Educational Objectives: From Dr. King's presentation attendees will learn the administrative and fiscal ramifications of initiating prenatal programming for indigent women within the context of an operating local health unit. They will learn the several things required for the successful beginning of programming for meeting medical needs of pregnant, indigent women.

Dr. Atkinson's presentation will provide the "recipe" for the medical surveillance of pregnancy—to include management, from the health department point of view, of deviations from normal.

Dr. Sack's presentation is planned to provide practicable guidelines for the use of the new hepatitis vaccine, and the public health implications of a number of vaccines new to the market and those soon to be released. The attendees will receive the information critical to their role of public health leaders in their respective communities regarding assistance and advice to others in the use of these new vaccines.

Ms. Emberton expects to provide the attendees with practicable techniques for morbidity data sharing between county health units and hospitals for early detection of rising incidents and the mutual use of these data for control of acute communicable conditions within the community setting.

Only within the past 24 months has cervical actinomycosis been recognized as a condition needful of special attention by family planning clinics and gynecologists. Dr. Vaughn has given very special attention to the matter in her family planning clinics at the Orange County Health Department. She proposes to describe her experience and present practicable procedures for suspecting, detecting and satisfactorily treating cervical actinomycosis. The condition is not rare in her practice among indigent women of Orange County.

SECTION ON RHEUMATOLOGY

(Co-sponsored by Florida Society of Rheumatology)

Thursday, May 5—1:30 p.m. to 5:30 p.m.

Paul H. Bridgeford, M.D., St. Petersburg
Program Chairman

"Current Concepts in Rheumatoid Arthritis"—William J. Koopman, M.D., Associate Professor of Medicine and Microbiology, and Deputy Director of the Multipurpose Arthritis Center, University of Alabama in Birmingham.

"Dermatologic Manifestations of Rheumatic Disease"—Neal S. Penneys, M.D., Ph.D., Professor of Dermatopathology, University of Miami School of Medicine.

"Current Concepts in Immunology"—William J. Koopman, M.D.

Educational Objectives: At the completion of this series of lectures, physicians with an interest in rheumatic disease should be able to:

1. Understand and be able to apply in every day practice the most recent developments and ideas in the pathophysiology, diagnosis and treatment of rheumatoid arthritis.
2. Effectively recognize and diagnose the various skin diseases that occur in conjunction with rheumatic conditions.

3. Take care of a patient with psoriatic arthritis, including differential diagnosis, pathophysiology, use of various treatment modalities available at the present time, in addition to managing the social and psychological implications of the disease.
4. Understand latest developments in the field of immunology and how this may be practically applied to every day practice of medicine.

SECTION ON SURGERY

(Co-sponsored by Florida Chapter, American College of Surgeons, and Florida Association of General Surgeons)
Friday, May 6—2:00 p.m. to 5:00 p.m.
David H. Sharero, M.D., Belleair
and William H. Meyer, Jr., M.D., Fort Pierce
Program Chairmen

"Recent Advances in Transplantation Surgery"—Thomas Starzl, M.D., Professor of Surgery at the University of Pittsburg School of Medicine.

"Recent Legislative Decisions Affecting Medical Litigation in Florida"—James W. Walker, M.D., President and John Thrasher, Esquire, Attorney for Professional Insurance Management Company.

Educational Objectives: This will be of benefit not only to the surgeons regarding the advances in this field in this sub-specialty of surgery, but to all physicians as well since it will define the pioneer efforts of this most famous man in the field and will define the future as well. Certainly the biology of transplantation surgery has opened a door to understanding of immunosuppression in general and should be of benefit to all who attend.

Objectives and goals of having two principle members of our PIMCO organization define new legislative advances is of utmost importance to all physicians in Florida and following the mandate of the headquarters of the American College of Surgeons this is incorporated into the program to include matters of socio-economic interest in our deliberations.

SECTION ON THORACIC AND CARDIOVASCULAR SURGERY

(Co-sponsored by Florida Society of Thoracic and Cardiovascular Surgeons)
Friday, May 6—1:30 p.m. to 5:30 p.m.
Gordon F. Moor, M.D., Lakeland
Program Chairman

"Management of Thoracic Surgical Infections"

"The Use of Musculo-cutaneous Flaps in the Management of Median-sternotomy Wound Infections"—John Boswick, M.D., Emory University School of Medicine, Atlanta, Georgia.

"Management of Mediasternal Deep Wound Infections Following Cardiac Surgery"—Gerard Kaiser, M.D., Dept. of Cardiothoracic Surgery, University of Miami School of Medicine.

"The Present-day Management of Empyemas Complicating Thoracic Surgical Procedures"—Richard Thurer, M.D., Division of Cardiothoracic Surgery, University of Miami School of Medicine.

Educational Objective: The educational objective will be to apply the latest, up-to-date methods in the management of superficial and deep wound infections following cardiac surgery and in the management of empyemas complicating thoracic surgical procedures.

SECTION ON UROLOGY

Saturday, May 7, 1983—9:00 a.m. to 12:00 p.m.
Michael P. Small, M.D., Hialeah
Program Chairman

"Microscopically Controlled Surgical Excision (MOHS CHEMOTHERAPY) for Treatment of Penile Carcinoma"—Henry Menn, M.D., Professor, Department of Dermatology and Cutaneous Surgery; University of Miami School of Medicine.

Educational Objectives: The educational objective is to teach Urologists alternative surgical methods for treating cancer of the penis possibly circumventing the need for radical penile surgery.

CORRESPONDENCE

Editor's Note: Last year, a jury in Broward County awarded Susan Von Stetina a verdict of $12.47 million in a malpractice suit against Florida Medical Center of Lauderdale Lakes. In a subsequent separate proceeding, Circuit Judge Robert L. Andrews awarded Ms. Von Stetina's lawyer, Sheldon Schlesinger, a contingency fee of $4.4 million for his successful efforts. The award of the contingency fee in particular has stirred up considerable controversy in Florida and elsewhere. The following exchange of letters tracks the progress of a complaint that FMA filed against Judge Andrews with the Judicial Qualifications Commission, which promptly rejected it on grounds of lack of jurisdiction.

FLORIDA MEDICAL ASSOCIATION, INC.
JACKSONVILLE, FLORIDA

October 29, 1982

Judicial Qualifications Commission
Tallahassee, FL 32301

Re: Complaint Against Judge Robert L. Andrews

Dear Mr. Hulsey:

On behalf of the Florida Medical Association, Inc., I wish to file this complaint in regard to Judge Robert L. Andrews, a Circuit Judge in Broward County.

The basis of this complaint is Judge Andrews' recent order awarding an attorney $4.4 million dollars as a fee in a medical malpractice case (Susan Von Stetina v. Florida Medical Center). In his decision Judge Andrews indicated he took note of the fact that the Code of Professional Responsibility for Lawyers says that attorneys are entitled to "a reasonable attorneys fee." At least one Florida newspaper in an editorial on this issue asks the question is $14,600.00 a day reasonable pay for an attorney. That particular editorial which appeared in the *Tampa Tribune* on September 13, 1982 is enclosed for your information. This editorial and others that have been written since then have called attention to the outrageous fee awarded in this case by the Judge.

Section 768.56 Florida Statutes, provides in part that "...the Court shall award a reasonable attorneys fee to the prevailing

party in any civil action which involves a claim for damages by reason of injury, death or monetary loss on account of alleged malpractice...". This statute was intended to award either the plaintiff or the defendant a reasonable fee upon prevailing. One must wonder if Judge Andrews would have awarded the defendant's attorneys $4.4 million dollars had they prevailed!

The Judge's application in this case of that statute is beyond precedent. The absurd result reached by Judge Andrews in his determination of "reasonable" fee constitutes an abuse of his discretion and raises legitimate questions regarding his qualifications to serve on the bench. Common sense, which was obviously lacking, would argue strongly that the fee awarded by Judge Andrews is by no stretch of the imagination "reasonable", but is in fact ridiculous and obscene. This is particularly true when the information provided to Judge Andrews regarding the attorney's work on this case, showed that the attorney had been involved in the case for approximately one year.

The gross application of the above referenced statute in this case has fueled an already existing crisis situation in the area of professional medical liability litigation. By Judge Andrews' willful failure to perform his duties in the context of the application of the statute he has contributed immensely to the cost of insurance for professional liability which is in turn passed along to the consumers of the state of Florida in the form of higher health care costs. Moreover, it is indeed ironic that the Judge chose to allegedly base his decision on the Code of Professional Responsibility for Lawyers. One must wonder if the Judge is so misguided as to his understanding of what is "reasonable", what other areas of the law he has demonstrated such lack of judgement.

I trust that this Complaint will receive appropriate attention and that after review of the Judge's activities involved in this case, which in our opinion constitute a willful or persistent failure to perform duties, that he will be found to present unfitness to hold office.

Sincerely,

W. Harold Parham, D.H.A.
Executive Vice President

JUDICIAL QUALIFICATION COMMISSION
TALLAHASSEE, FLORIDA

November 5, 1982

Florida Medical Association, Inc.
Jacksonville, FL 32203

Re: Judge Robert L. Andrews, Seventeenth Judicial Circuit

Dear Dr. Parham:

This Commission is in receipt of your complaint dated October 29, 1982. Please be advised that Article V of the Florida Constitution solely vests a review of judicial decisions, including the abuse of discretion on the part of a trial judge, in the appellate courts of this state. The Florida Judicial Qualifications Commission is without jurisdiction to investigate judicial decisions rendered by judges.

It is noted that you forwarded a copy of your complaint to members of the Supreme Court, FMA Board of Governors, County Medical Society Presidents, news media and John E. Thrasher, Legal Counsel. You are advised that by such action you have violated the provision of Article V Section 12(d) which states in part: "Until formal charges against a justice or judge are filed by the Commission with the clerk of the Supreme Court of Florida all proceedings by or before the Commission shall be confidential...". Therefore, you should refrain from making any further public statements concerning a complaint filed with this Commission.

Sincerely,

John S. Rawls
General Counsel

FLORIDA MEDICAL ASSOCIATION, INC.
JACKSONVILLE, FLORIDA

November 11, 1982

Judicial Qualifications Commission
Tallahassee, FL 32301

Re: Judge Robert L. Andrews, Seventeenth Judicial Circuit

Dear Mr. Hulsey:

We have been advised by the staff of your Commission it is without jurisdiction regarding the complaint we filed on October 29, 1982 regarding Judge Andrews.

Your staff has indicated correctly that we forwarded a copy of our complaint relative to Judge Andrews to the Supreme Court and others.

We were advised, by competent legal counsel, that prior to filing the complaint and the Commission assuming jurisdiction of the matter that our first amendment rights, relative to our feelings regarding this matter, were not abridged by the provision in the Constitution your staff cited.

I am aware that after the Commission has taken jurisdiction of a complaint that all the subsequent proceedings by or before the Commission are confidential; however, your Commission declined to assume jurisdiction, therefore, the question is moot.

Sincerely,

W. Harold Parham, D.H.A.
Executive Vice President

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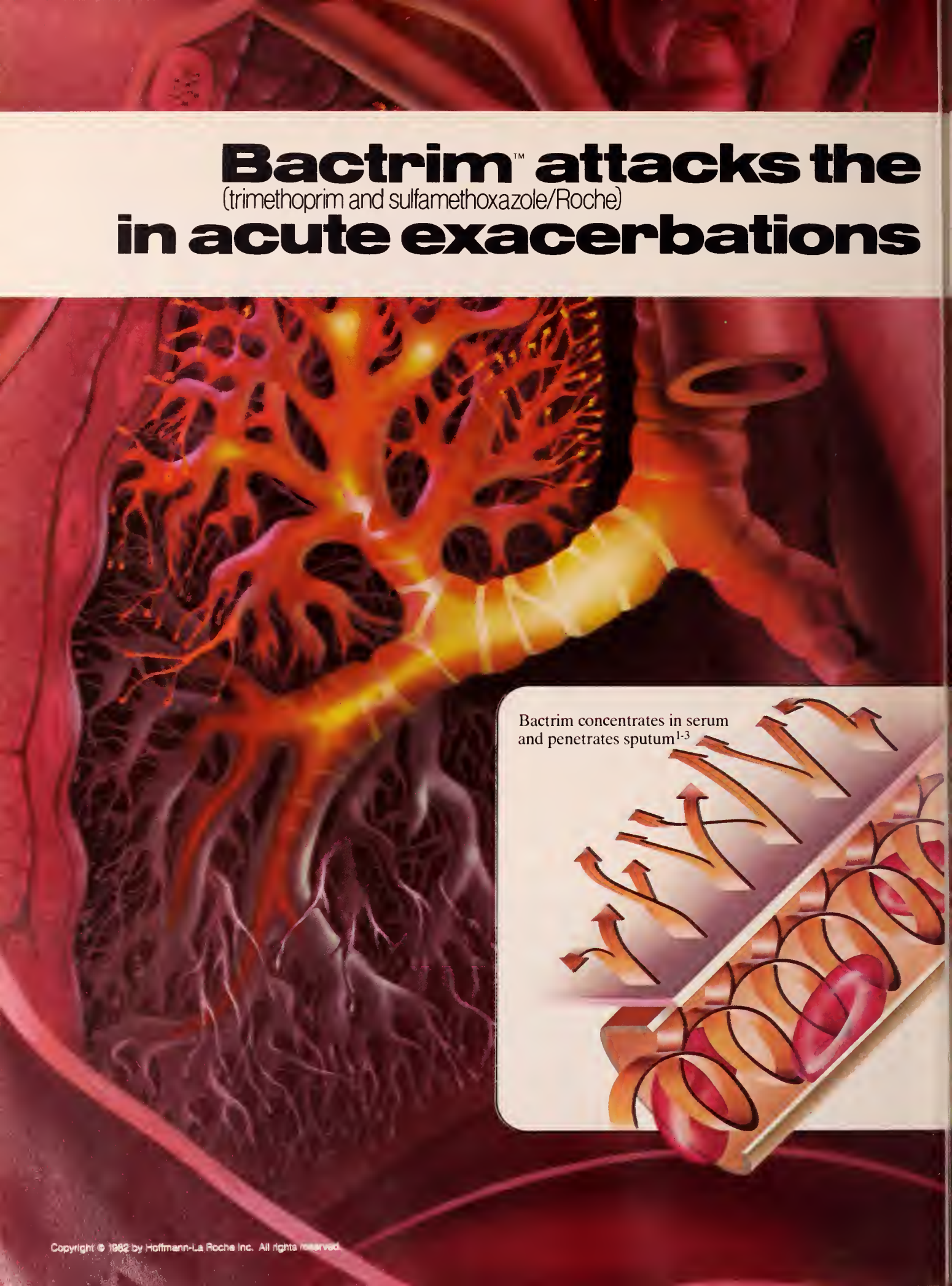
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Bactrim™ attacks the
(trimethoprim and sulfamethoxazole/Roche)
in acute exacerbations



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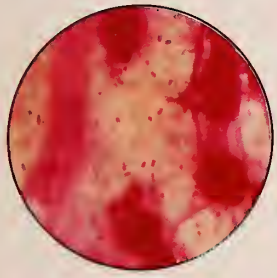
major pathogens of chronic bronchitis*

Bactrim clears sputum of susceptible bacteria

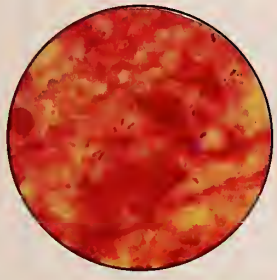
In sputum cultures from patients with acute exacerbations of chronic bronchitis, *H. influenzae* and *S. pneumoniae* are isolated more often than any other pathogens.[4,5] One study of transtracheal aspirates from 76 patients with acute exacerbations found that 80% of the isolates were of these two pathogens.[5]

Bactrim is effective *in vitro* against most strains of both *S. pneumoniae* and *H. influenzae*—even ampicillin-resistant strains. And in acute exacerbations of chronic bronchitis involving these two pathogens, sputum cultures taken seven days after a two-week course of therapy showed that Bactrim eradicated these bacteria in 91% (50 of 55) of the patients treated.[6]

attacks *H. influenzae*—even ampicillin-resistant strains



attacks *S. pneumoniae*



Bactrim reduces coughing and sputum production

In three double-blind comparisons with ampicillin *q.i.d.*, Bactrim DS proved equally effective on all clinical parameters.[7-9] Bactrim reduced the frequency and severity of coughing, reduced the amount of sputum produced and cleared the sputum of purulence.

Bactrim has the added advantages of *b.i.d.* dosage convenience and a lower incidence of diarrhea than with ampicillin, and it is useful in patients allergic to penicillins.

Bactrim also proved more effective than tetracyclines in 10 clinical trials involving nearly 700 patients.[10] Overall clinical condition of the patients, changes in sputum purulence, reduction in sputum volume and microbiological clearance of pathogens—all improved more with Bactrim therapy than with tetracyclines. G.I. side effects occurred in only 7% of patients treated with Bactrim compared with 12% of tetracycline-treated patients. (See Adverse Reactions in summary of product information on next page.)

Bactrim is contraindicated in pregnancy at term and nursing mothers, infants under two months of age, documented megaloblastic anemia due to folate deficiency and hypersensitivity.

Bactrim DS. For acute exacerbations of chronic bronchitis in adults* when it offers an advantage over single-agent antibacterials.

References: 1. Hughes DTD, Bye A, Hodder P: *Adv Antimicrob Antineoplastic Chemother 1/2*:1105-1106, 1971. **2.** Jordan GW *et al: Can Med Assoc J 112*:91S-95S, Jun 14, 1975. **3.** Beck H, Pechere JC: *Prog Antimicrob Anticancer Chemother 1*:663-667, 1969. **4.** Quintiliani R: Microbiological and therapeutic considerations in exacerbations of chronic bronchitis, in *Chronic Bronchitis and Its Acute Exacerbations: Current Diagnostic and Therapeutic Concepts;* Princeton Junction, NJ, Communications Media for Education, Inc., 1980, pp. 9-12. **5.** Schreiner A *et al: Infection 6*(2):54-56, 1978. **6.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **7.** Chodosh S: Treatment of acute exacerbations of chronic bronchitis: results of a double-blind crossover clinical trial, in *Chronic Bronchitis and Its Acute Exacerbations: Current Diagnostic and Therapeutic Concepts. Op. cit.*, pp. 15-16. **8.** Chervinsky P: Double-blind clinical comparisons between trimethoprim-sulfamethoxazole (Bactrim™) and ampicillin in the treatment of bronchitic exacerbations. *Ibid.*, pp. 17-18. **9.** Dulfano MJ: Trimethoprim-sulfamethoxazole vs. ampicillin in the treatment of exacerbations of chronic bronchitis. *Ibid.*, pp. 19-20. **10.** Medici TC: Trimethoprim-sulfamethoxazole (Bactrim™) in treating acute exacerbations of chronic bronchitis: summary of European clinical experience. *Ibid.*, pp. 13-14.

Economical b.i.d.

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole/Roche)

*Due to susceptible organisms. **Please see next page for summary of product information.**

Bactrim™

(trimethoprim and sulfamethoxazole/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended, therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias.* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions.* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN

Adults. Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children. Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100, Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500, Tel-E-Dose® packages of 100, Prescription Paks of 40. *Pediatric Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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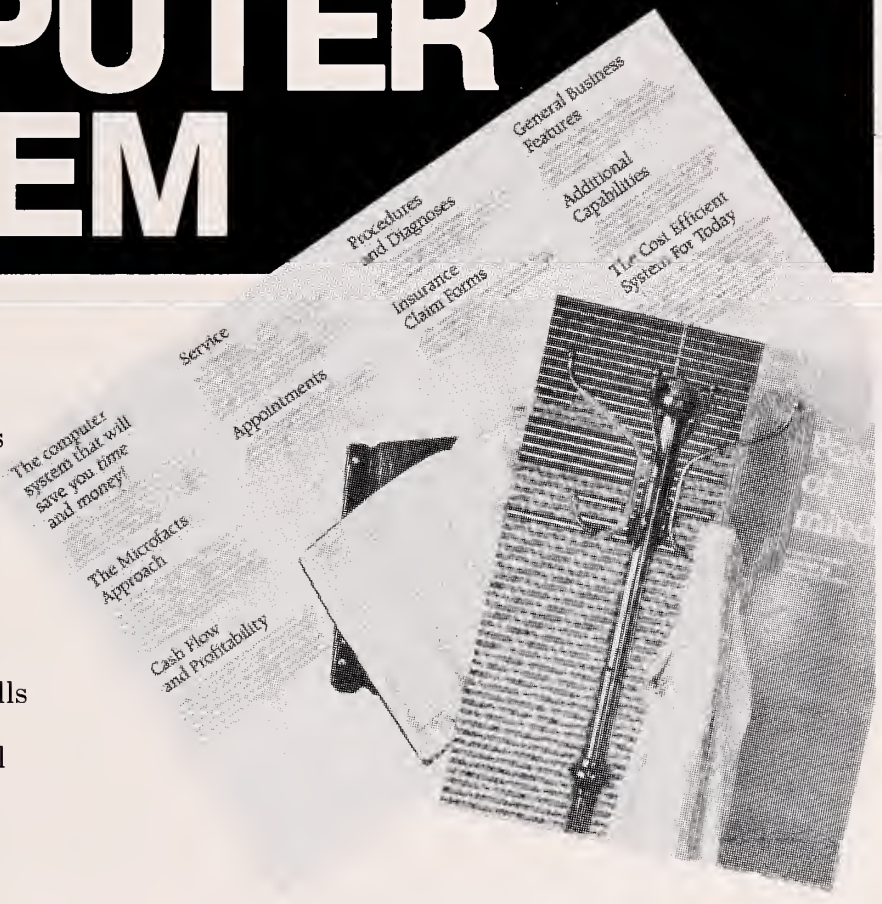
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BOOK REVIEWS

Book Review Editor — **F. Norman Vickers, M.D.**

Pain control - The Bethesda Program

By Bruce Smoller, M.D. and Brian Shulman, M.D., 288 Pages plus Bibliography and Index. Price $15.95. Doubleday and Company, Garden City, New York, 1982.

Dr. Smoller is a psychiatrist and orthopedic surgeon, and Dr. Schulman is a psychiatrist. Both specialize in management of pain and have run a Pain Control Center in Bethesda, Maryland for several years. In this book, they present a practical program for patients who suffer from chronic pain.

Forty million Americans are estimated to suffer from chronic pain. Drs. Smoller and Shulman view pain as a "multisystem process". The guiding principle of the treatment program is that each patient "must assume responsibility for the control of his pain". The authors feel that pain is learned maladaptive behavior reinforced by contion responses, ineffective treatment, poor physical condition, abuse and misuse of drugs, as well as emotional stress, anxiety and poor nutrition. The book is directed toward breaking that cycle in patients who suffer, especially low back pain, headaches, facial pain and arthritis.

The central portion of the book consists of a discussion of the many ways in which pain can affect a person's life and destroy the pain sufferer both physically and emotionally. Their program for self help consists of first facing the fact that the patient himself or herself must accept responsibility for the control of his or her pain. Pain medication is described in detail. There is an interesting chapter on obesity as an aggravating factor for pain and practical suggestions for dietary control. Other chapters include relation exercises, and general physical condition and appropriate exercises. The authors also discuss insomnia from chronic pain and what to do about it; and the sexual problems of the pain patient and how they should be handled.

The beginning portions of this book are excellent, especially the author's discussion of how chronic pain affects one's life. The general discussion indicating that patients need to control their own pain is also useful; the sections on pain medication, diet, relaxation, exercise and sex are helpful. The book concludes with a sample form for construction of a pain diary, which is the first step in accepting control of one's own pain.

Unfortunately, in my experience the average patient with severe, incapacitating, chronic pain needs more help than can be achieved from following this self-help book. I would recommend it to my chronic pain patients, but with the proviso that if the program makes sense but is only partially effective, than referral to a Pain Center may still be necessary. The book is well edited and well written with only a few errors. All in all, however, I would recommend the book as a first step for the chronic pain patient.

Stephen A. Shaivitz, M.D.

● Dr. Shaivitz is in the private practice of Neu rology in West Palm Beach, and is the immediate past President of the Florida Society of Neurology.

Review of medical microbiology

By Ernest Jawetz, M.D., Ph.D., Joseph L. Melnick, Ph.D. and Edward A. Adelberg, Ph.D. 553 Pages. Lange Medical Publications, Los Altos, California.

This text presents a concise, clinically oriented review of medical microbiology for the medical student, house officer and practicing physician. This book may be helpful for students and physicians reviewing for state licensure examination. There are numerous other publications available to the house officer and practicing physician which will probably serve them better in providing appropriate information of clinical infectious disease topics.

The who, what, when, where and why of leadership

Leadership—WHAT IS IT? It is accepting the responsibility for the success, effectiveness, and reputation of a group. It is being able to share skills, knowledge, and resources with others. It is being positive and enthusiastic and using teamwork to ensure success. In these ways, leadership and followership are interchangeable, for the characteristics that make an individual a good leader also make him a good follower. Leadership is fulfilled by different individuals as the situation changes. Therefore, leadership may come about when a group needs assistance in the solution of a particular problem. BE PREPARED! You never know when you will be in a position of leadership.

Leadership—WHO HAS IT? A person who is caring, with a sense of responsibility; a person who is not afraid of challenges and enjoys working with people. A leader is a person who likes to share. Leaders are decision makers with a strong sense of commitment to achieve goals in a democratic structure. A leader is a person who can communicate with others creatively analyze the situation; and change when necessary. A person is a leader when he contributes to the formulation and attainment of group goals. Leadership is exerted by individuals with or without official status. LEADERS MAKE THINGS HAPPEN!

Leadership—WHY BOTHER? To meet challenges, to experience a full and exciting time, to be creative, to develop resources, to share talents and abilities, to stay aware of changing times, and to make contributions to society. WHEN YOU GIVE, YOU REALLY GET!

Leadership—WHEN CAN YOU LEARN MORE? At the Auxiliary Leadership Seminar on January 28, 1983 at the Contempory Resort Hotel in Disney World and at the FMA Leadership Conference, January 28-30, also at the Contemporary Hotel. These meetings will be well worth your time. Topics that will be covered include: motivation, parliamentary procedures, listening skills, time management, attitude, and evaluation techniques. Our organizations will profit from your attendance, and your daily lives will be enriched!

Leadership—WHERE WILL IT TAKE YOU? Wherever you let your abilities lead you. Leaders take risks and dream a little. They share their talents and abilities to meet the challenges of the future. THERE ARE NO LIMITS.

Leadership—WHAT IS IT? It is the lifeblood of our organization. WE NEED YOU. Won't you please give?

Mrs. S. Bruce Gerber (Priscilla)
President-Elect FMAA
Winter Haven, Florida

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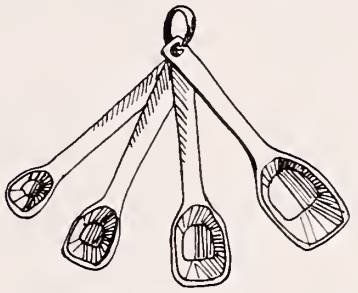
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FEBRUARY

The Seventeenth Annual Symposium on Cosmetic Surgery, February 3-5, Cedars Medical Center, Miami. For info.: Thomas J. Baker, M.D., 1501 S. Miami Ave., Miami 33129. (305) 854-2424.

Clinical Approach to Exercise Testing, Feb. 3-5, Hyatt Orlando, Orlando. For info.: Stephen P. Glasser, M.D., Univ. of South Florida College of Medicine, Box 19, 12901 N. 30th Street, Tampa 33612, (813) 974-2880.

Adult & Pediatric Urological Cancers, Feb. 4-5, St. Joseph's Hospital, Tampa. For information: Bruce Collison, Community Relations (813) 870-4340.

Cancer Conference, Feb. 4-5, St. Joseph's Hospital Auditorium, Tampa, For information: Ralph Jensen, M.D., St. Joseph's Hospital, P.O. Box 4227, Tampa 33677.

Family Practice Weekend, February 4-6, The Hilton Hotel, Gainesville. For information: William Lassiter, M.D., 625 S.W. Fourth Ave., Gainesville. (904) 392-4541.

10th Annual George F. Paff Seminar, Feb. 4-6 Ft. Lauderdale For information: Univ. of Miami, Division of Continuing Medical Education, P.O. Box 016960, Miami 33101, (305) 547-6716.

Third Annual Treasure Coast Medical-Surgical Review, Feb. 5-6, Dodgertown Conference Center, Vero Beach. For information: John L. Rodgers, M.D., P.O. Box 573, Vero Beach 32960, (305) 567-9711.

The Postgraduate Seminar in the Fundamentals of Otolaryngic Allergy and Clinical Applications, Feb. 5-10, Don CeSar Beach Resort, St. Petersburg Beach. For information: Hueston C. King, M.D., 4675 Ponce DeLeon Blvd., Miami 33146.

9th Annual Conference on Anesthesiology, Feb. 5-12, Vail, Colorado. For information: Univ. of Miami School of Medicine, Dept. of Anesthesiology (R370), P.O. Box 016960, Miami 33101, (305) 547-6411.

Internal Medicine 1983 — 18th Annual Postgraduate, Feb. 6-11, Miami Beach. For info.: Univ. of Miami School of Medicine, P.O. Box 016960, Miami 33101, (305) 547-6063.

Topics in Geriatric Medicine, Feb. 10-12, Diplomat Resort and Country Club, Hollywood. For information: Kevin Newman, M.D., (305) 841-5144.

Prostaglandins in Medicine, Feb. 11-12, The Dutch Inn, Lake Buena Vista. For information: Ms. Grace Wagner, University of Florida, Box J-233, JHMHC, Gainesville 32610, (904) 392-3143 or 392-3183.

10th Annual Homecoming Symposium, Feb. 11-12, Sonesta Beach Hotel, Key Biscayne. For information: University of Miami School of Medicine, Department of Psychiatry (D29), Post Office Box 016960, Miami 33101, (305) 325-6335.

Florida Midwinter Seminar in Ophthalmology, Feb. 14-16, West Palm Beach. For info.: University of Miami School of Medicine, Department of Ophthalmology (D880), P.O. Box 016960, Miami 33101, (305) 547-6540.

Florida Midwinter Seminar in Otolaryngology, Feb. 17-19, West Palm Beach. For information: University of Miami School of Medicine, Department of Ophthalmology (D880), P. O. Box 016960, Miami 33101, (305) 547-6540.

Fifth Annual Oncology Update, Feb. 18-19, Cedars' Seminar Center, Miami. For information: Ms. Thelma MacGregor, 1400 N.W. 12th Avenue, Miami 33136, (305) 325-5558.

Clinical Management of the Elderly Patient for the Practicing Physician & Other Health Professionals, Feb. 18-19, Americana Dutch Inn, Orlando. For information: L. Gregory Pawlson, M.D., M.P.H., Rm. 322, 1229 25th St., N.W., Washington, D.C. 20037.

The 7th Annual Symposium in Clinical Cardiology, "Cardiovascular Pharmacology", Feb. 18-19, Sheraton Sand Key Hotel, Clearwater. For info.: Donald R. Eubanks, M.D., Morton F. Plant Hospital, 323 Jeffords Street, Clearwater 33517, (813) 441-5166.

Arrhythmias & Cardiac Ischemia: Diagnosis & Management, Feb. 18-20, Bahia Mar Hotel, Ft. Lauderdale. For information: International Medical Education Corp, 64 Inverness Dr. E., Englewood, Colorado 80112, (800) 525-8651.

The 4th International Workshop on Neurological Surgery of the Ear and Skull Base, Feb. 19-24, Hyatt House, Sarasota. For information: Marcia Gordon, Sarasota County Medical Society, 1845 Hillview Street, Sarasota 33579, (813) 366-2700.

International Radiology Conference, Feb. 20-Mar. 6, Tokyo-Hong Kong-Honolulu. For information: Lucy R. Kelley, Radiology Seminars, Inc., P.O. Box 343762, Coral Gables 33134.

Update in Hepatitis, Feb. 21, Royal Palm Yacht Club, Ft. Myers, For information: Michael Steier, M.D., P.O. Box 1704, Ft. Myers 33902, (813) 936-1645.

Conference on the Beach - 4th Annual Family Practice Update, Feb. 21-26, Daytona Hilton, Daytona Beach. For information: Richard W. Dodd, M.D., (904) 258-1584.

Hepatobiliary Disease in Clinical Practice V, Feb. 24-26, Sheraton Bal Harbour, Bal Harbour. For information: University of Miami School of Medicine, Department of Continuing Medical Education (D23-3), P.O. Box 016960, Miami 33101, (305) 547-6716.

10th Pediatric Dermatology Seminar, Feb. 24-27, Carillon Beach Hotel, Miami Beach. For information: Guinter Kahn, M.D., Parkway Hospital Medical Plaza, Suite 401, 16800 N.W. 2nd Ave., North Miami Beach 33169, (305) 652-8600.

Peripheral Vascular Disease for the Non-Surgeon, Feb. 25, Royal Palm Yacht Club, Fort Myers. For information: Warren E. Hagen, M.D., 3596 Broadway, Fort Myers 33901, (813) 936-8555.

Eighth Annual Midwinter Seminar in Obstetric and Gynecology, Feb. 25-27, Don Cesar Beach Resort Hotel, St. Petersburg. For information: Dept. of OB/GYN, Medical Center, Box 18, Univ. of S. FL, Tampa 33612. (813) 974-2088.

Pediatric Advanced Life Support, Feb. 26, Mease Hospital, Tampa. For information: Charles Aucremann, M.D., University of South Florida College of Medicine, Dept. of Family Practice, Tampa.

Spine Surgery, Back to Basics Feb. 28-March 3, Kissimmee. For information: Univ. of Miami School of Medicine, Department of Orthopedics (D27), P.O. Box 016960, Miami 33101, (305) 547-6996.

Basic Neurology for Psychiatrists and Generalists, Feb. 27-March 4, Miami Beach. For information: University of Miami School of Medicine, Department of CME, Post Office Box 016960, Miami 33101, (305) 547-6716.

MARCH

15th Teaching Conference in Clinical Cardiology, Mar. 2-5, The Sheraton Bal Harbor Hotel, Bal Harbor. For information: Michael Gordon, M.D., University of Miami School of Medicine, Medical Training & Stimulation Lab., P.O. Box 016960, Miami 33101, (305) 547-6491.

Breast Disease Update, Mar. 2-6, Dutch Inn, Lake Buena Vista. For information: Lourdes S. Fuentes, Mount Sinai Medical Center, 4300 Alton Road, Miami 33140, (305) 674-2424.

Intensive Care for Neurological Trauma and Disease 1983, March 2-6, Americana Dutch Resort Hotel, Lake Buena Vista. For information: Division of CME D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. (305) 547-6716.

Current Topics in Internal Medicine, March 3-5, PGA Sheraton Resort, Palm Beach Gardens. For info.: Michael C. Schweitz, M.D., (305) 659-4242.

X-ray Interpretation for the Primary Care and Emergency Physican, March 3-6, Bahia Mar Hotel and Yachting Club, Fort Lauderdale. For info.: Ms. Llera, E.M.S.A., 8200 W. Sunrise Blvd., Plantation 33322, (305) 472-6922.

Internal Medicine Update '83, Mar. 7-12, Americana Dutch Resort Hotel, Lake Buena Vista. For information: Barry E. Sieger, M.D., 1414 South Kuhl Avenue, Orlando 32806, (305) 841-5144.

Hematology-Oncology Update, Mar. 8-11, Holiday Inn Surfside, Clearwater. For information: Robert Miller, M.D., 701 6th St. S., St. Petersburg 33701, (813) 823-1234, Ext. 2022.

1st Annual Gulfcoast Hematology/Oncology Conference Mar. 9-11, Holiday Inn, Surfside, Clearwater. For information: Robert Miller, M.D., (813) 823-1234, Ext. 2022.

Fourth Annual Pediatric Neurology Postgraduate Course, Mar. 9-12, Eden Roc Hotel, Miami Beach. For information: Michael Duchowny, M.D., 6125 S.W. 31st St., Miami 33155, (305) 666-6511.

Problems in Rheumatology, Mar. 10-13, Don CeSar Beach Resort Hotel, St. Petersburg. For information: Bernard Germain, M.D., Univ. of South Florida, Box 19, 12901 North 30th Street, Tampa 33612, (813) 974-2681.

E C G Interpretation of Arrhythmia Management, Mar. 11-13, Sheraton Royal Biscayne, Key Biscayne. For information: Stephen E. Mattingly, 64 Inverness Dr., E., Englewood, Colo. 80112. (800) 525-8651.

Fifth Annual Winter Seminar of the Miami Ophthalmological Society, Mar. 12-19, Sun Valley Lodge, Sun Valley, Idaho. For information: David J. Singer, M.D., F.A.C.S., 1160 Kane Concourse, Miami Bch. 33154, (305) 861-4946.

Advances in Resuscitation, March 14, St. Mary's Hospital, West Palm Beach. For info.: Dr. Gerald J. O'Connor, 901 45th St., West Palm Beach 33407, (305) 659-1633.

Current Clinical Concepts in Otolaryngology - 1983, March 15-17, Eden Roc Hotel, Miami Beach. For information: Anthony J. Maniglia, M.D., University of Miami School of Medicine, Post Office Box 016960, Miami, (305) 547-6716.

Cancer of Prostate Gland, March 17, Fort Cooper Station, Inverness. For information: Dale L. Osterling, M.D., 316 S. Line Avenue, Inverness 32650, (904) 726-5661.

14th Annual Topics in Internal Medicine, Mar. 17-18, Gainesville Hilton, Gainesville. For information: Ms. Grace Wagner, University of Florida CME, JHMHC, (904) 392-3143 or 392-3183.

Human Sexuality and Medical Practice, March 18-19, Daytona Hilton, Daytona. For information: Richard Dodd, M.D., Post Office Box 1990, Daytona Beach 32015, (904) 248-1584.

Ambulatory Electrocardiology: Clinical Applications, Methodology and Interpretation, Mar. 18-20, Don CeSar Hotel, St. Petersburg. For info.: Stephen E. Mattingly, 64 Inverness, Dr., E., Englewood, Colo. 80112. (800) 525-8651.

1983 Update in Obstetrics and Gynecology, Mar. 21-23, Orlando Marriott, Orlando. For information: Frank Riggall, M.D., Dept. of Ob/Gyn, Box J-294, Gainesville 32601.

5th Annual Family Practice Review, March 21-25, Holiday Inn Surfside, Clearwater. For information: C.E. Aucremann, M.D., 701 Sixth Street South, St. Petersburg 33701, (813) 823-1234.

Recent Advances in Nuclear Medicine and Other Imaging Modalities, Mar. 23-26, Eden Roc Hotel, Miami. For information: Division of Continuing Medical Education D23-3, Univ. of Miami School of Medicine, P.O. Box 016960, Miami.

Clinical Postgraduate Seminars in Gastroenterology - "Gastrointestinal Cancer", March 24, Medical Center Auditorium, Tampa. For information: Charles Aucremann, M.D., 701 6th Street South, St. Petersburg, 33701, (813) 823-1234.

Recent Advances in Nuclear Medicine Instrumentation, March 24-26, Miami. For info.: University of Miami School of Medicine, Post Office Box 016960, Miami 33101, (305) 547-6716.

Interesting Topics in Orthopedics: 1983, Mar. 24-26, PGA Sheraton Resort, Palm Beach Gardens. For informatio: Michael Zeide, M.D., 7820 Edgewater Dr., West Palm Beach 33406. (305) 967-8866 or 832-5167.

Orthopaedics for Family and Emergency Physicians, Mar. 24-26, Royal Plaza Hotel, Lake Buena Vista. For info.: Allan March, M.D., (904) 392-1161.

Infectious Diseases & Antibiotic Therapy '83, March 24-26, American Dutch Resort Hotel, Lake Buena Vista. For info.: Barry E. Sieger, M.D., 1414 South Kuhl Avenue, Orlando 32806, (305) 841-5144.

2nd Annual Symposium on Clinical Management of Diabetes and Endocrine Disorders, Mar. 24-27, Don CeSar Beach Resort, St. Petersburg. For information: Robert Farese, M.D., (813) 971-4500, Ext. 568.

Diagnostic Techniques in Pulmonary Medicine, Part I, Mar. 26-27, University of South Florida, Tampa. For information: David A. Solomon, M.D., 13000 N. 30th St., Tampa 33612, (813) 971-4500.

17th Family Practice Review, Mar. 28-Apr. 1, Sheraton World Conference Center, Orlando. For information: Lamar Crevasse, M.D., (904) 392-3143.

APRIL

Advanced Cardiac Life Support, Apr. 8-10, Pasco-Hernando Community College, New Port Richey. For information: James M. Marlowe, M.D., Post Office Box 1058, New Port Richey 33552, (813) 842-9574.

Family Practice Weekend - University of South Florida, April 8-10, Tampa Hyatt Regency Hotel, Tampa. For information: John E. Perchalski, M.D., 10320 56th St., Temple Terrace 33617, (813) 988-7345.

The Diagnosis and Management of Tachyarrhythmias, April 15 & 16, Pensacola Country Club, Pensacola. For information: W. Daniel Doty, M.D., (904) 434-1093.

13th Annual Radiation Therapy Clinical Research Seminar, April 28-30, University of Florida Health Center, Gainesville. For information: James T. Parsons, M.D., Box J-385, JHMHC, Univ. of Florida, Gainesville 32610, (904) 392-3161.

Problems in Clinical Anesthesia, The Pediatric Patient and the Cardiac Patient, April 30, Howard Johnsons, Pensacola Beach. For information: Warren W. Sears, M.D., 1717 N. "E" St., Suite 205, Pensacola 32501, (904) 434-4718.

Orthopedic Update for Primary Care Physicians, April 29-May 1, Holiday Inn Beach Resort, Pensacola. For information: Andrew C. Gygi, M.D., 5150 Bayou Boulevard, Suite 2E, Pensacola 32503, (904) 477-9631.

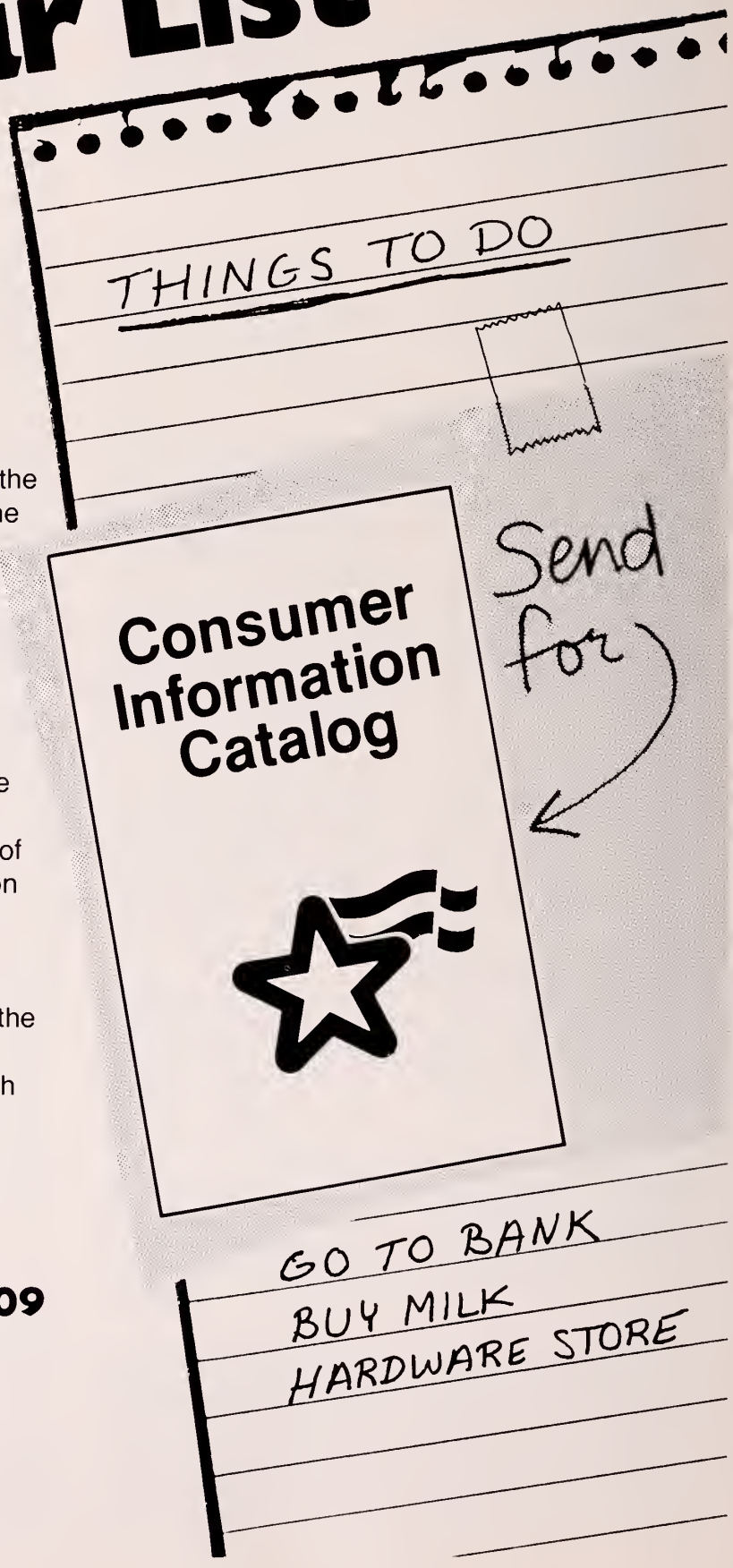
JUNE

34th Annual Scientific Assembly, June 15-19, The Breakers Hotel, Palm Beach. For information: Lee A. Fischer, M.D., (305) 968-7600.

Medico Surgical Concepts in Chest Disease, June 12, Hyatt Regency Hotel, Tampa. For information: Americo Gonzalvo, M.D., 5415 West Laurel Blvd., Tampa 33607, (813) 879-3400.

Arrhythmias and Cardiac Ischemia: Diagnosis and Management, June 24-26, Orlando Hyatt. For information: Howard Bronson, M.D., 64 Inverness Dr., E., Englewood, Colorado 80112, (303) 333-1577.

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ONCOLOGIST — HEMATOLOGIST needed. Busy Tampa area practice needs associate. Full benefits, Salary or percentage. Private practice in your specialty. Send C.V. to Box 7382, Tampa, Florida 33673.

INTERNIST with or without sub-specialty for West Broward Medical Group. Immediate opening. Reply: C-1124, Post Office Box 2411, Jacksonville, FL 32203.

PRIMARY CARE FACILITY in West Palm Beach seeking part time physicians for hourly work. Send C.V. to Administrator, Post Office Box 25986, Tamarac, Fla. 33320.

Situations Wanted

HUSBAND (BC in Pediatrics) and WIFE (BE in Neomatology) both currently holding full time academic appointments at a major midwestern medical center wish to relocate on the Florida coast. Full time hospital based practice with administrative/teaching responsibilities plus a part time neonatology position at a Level II or III nursery preferred. Other opportunities will be considered. Please contact C-1121, Post Office Box 2411, Jacksonville, Fl 32203.

POSITION WANTED: Radiology manager in hospital setting. Have had 17 years experience as a Manager - last position held was at Loyola University Medical Center, Chicago. Expertise includes excellent communication skills, staff development, systems analysis, budgeting, financial analysis and capital equipment purchasing. Will also consult. Desire to locate permanently in the Fort Myers - Tampa area. Reply: Marianne Troy, R.T., M.S., Post Office Box 941, Cape Coral, Florida 33910.

WANTED: PRACTICE IN Internal Medicine, Part time or shared. Smaller population area. Boards in Int. Med., Semi retired, desire location change. C-1129, P.O. Box 2411, Jacksonville, FL 32203.

RESIDENCY TRAINED, board certified Family Physician, 46, seeking solo, group, association, partnership in the Orlando Tampa, Melbourne area. Reply: Young H. Kim, M.D., P.O. Box 575, Sharpes, FL 32959.

INTERNIST / CARDIOLOGIST and PEDIATRICIAN couple seeking practice in Florida. Solo, partnership, hospital based. Available July 1983. Contact: Wali Khan, M.D., 16 W. 500 Honeysuckle Rose, Hinsdale, Ill. 60521, (312) 986-1867, or (312) 633-6000.

OB/GYN, Board eligible, University trained, looking for solo, group, partnership, also consider buying practice. Available July-83. Excellent surgical and ultrasound experience. Contact: (212) 786-7692.

MEDICAL DIRECTOR General surgeon with clinical experience in both solo and group practice. Chief Medical Executive of a community hospital for eight years, with experience in medical staff affairs, quality assurance and utilization review. Interested in full-time position in administrative medicine, as Medical Director of a hospital or clinic. Contact: C-1119, P.O. Box 2411, Jacksonville, FL 32203.

INTERNIST seeks to purchase practice in South Florida. Broker may respond. C-1122, P.O. Box 2411, Jacksonville, FL 32203.

ABA DIPLOMATE recently trained in all aspects of anesthesiology wishes to relocate to Florida for a group practice of fee for service. Reply: C-1125, Post Office Box 2411, Jacksonville, FL 32203.

FIVE YEARS GENERAL PRACTITIONER with three years Emergency experience, seeks position any place in Florida. Available January 1983 or July 1983. Reply: E.G. Mayo, M.D., 9712 Trejoil Place, Salinas, CA 93907.

NEUROLOGIST: Trained at major University Neurogy program. Skilled diagnostician. EMG fellowship. Expertise in EEG, Evoked potentials, CT. Wishes to relocate to Tampa or Miami area. Contact: C-1114, Post Office Box 2411, Jacksonville, FL 32203.

INTERNIST, Board eligible, looking for position - group or solo practice or emergency room. Contact: Vinod U. Shalh,M.D., 4614 South Blvd., N.W., Apt. 11, Canton, Ohio 44718. Phone: (216) 493-9053.

INTERNIST — presently practicing in Florida desires to relocate. Group, partnership or solo considered. Available immediately. (305) 949-0376.

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DEERFIELD BEACH, FL Share 5½ days per week. Fully furnished med/sur office. Three exam rooms, lab, waiting room, business office. Best suited for GP, Psychiatrist, Med/subspecialist, Podiatrist, Ortho/surgeon. P.E. Callaghan, M.D., 4800 N.E. 20th Terrace, Ft. Lauderdale, FL 33308, (305) 771-8510.

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MEDICAL PRACTICE FOR SALE: Physician recently expired. Gross potential more than 100,000 per year. 4143 W. Willsborough Avenue, Tampa, Florida 33614. Phone: 884-5137.

OPHTHALMOLOGIST'S office 1350 sq. ft., available for rent in Medical Center adjacent to a community hospital. 107 Medical Center, Sebring, Florida 33870, (813) 385-0149.

FURNISHED office for sublease part-time. North Miami Beach, Parkway Medical Plaza, 652-1551.

FAMILY PRACTICE FOR SALE: West Palm Beach area. Fully equiped office. Rapidly growing area. Reply: C-1116, P.O. Box 2411, Jacksonville, FL 32203.

WEST BOCA RATON — Share doctor's office and secretary full time. Prestigious building. Use of two exam rooms, business office, consultation office, reception area. (305) 392-9200.

SHARE OR SUBLEASE part time a new 1500 square foot fully equiped medical office adjacent to the new Delray Community Hospital, Delray Beach, Florida (305) 498-5666.

OB/BYN PRACTICE FOR SALE. Aspen, Colorado. Gross over $200,000. For details write: Box 11626, Aspen, Colorado 81611.

FULLY EQUIPPED Medical Center in busy shopping center in S.W. Miami. Owner retiring and leaving county end of 1982. Active general practice including contracts. Phone 226-8727/28 weekday mornings except Thursdays.

FOR SALE: HOME - OFFICE - PRACTICE. Super prestigious location on busy street. Convenient to hospitals, schools, shopping malls, restaurants and offices. ATTTACTIVE TERMS! Established general or family medical practice included in package sale. For information please contact: (305) 522-0700 or write J. Whitson, 1011 SE 17th Street, Ft. Lauderdale, FL 33316.

Real Estate

ATTRACTIVE CONDOMINUM OFFICES for sale next to Blake Hospital in Bradenton, FL. Ideal location — some rentals. Address all inquiries to: P.O. Box 1195, Bradenton, Florida 33505.

OUTSTANDING LOCATION FOR SPECIALISTS: St. Nicholas Medical Center. Central location, off street parking and all utilities furnished (including janitor service). Contact W.G. Allen Jr., Owner-Manager, St. Nicholas Medical Center, 3127 Atlantic Blvd., Jacksonville, Florida 32207. Phone (904) 398-5500.

FOR SALE — LAKE PARK, FLORIDA, medical building, 2016 sq. ft. Four year old concrete block, central air and heat. 12,500 sq. ft. landscaped corner lot, black top parking, main street. Reply: C-1117, P.O. Box 2411, Jacksonville, Florida 32203.

VERO BEACH — 3000 sq. ft. Oceanfront luxury condominium - security - tennis - pool - shopping - terms - 1983 closing - $355,000.00-$70,000.00 under list. Call (305) 567-0889.

CLEARWATER - Panoramic Residence in Prestigious area. Pool. 2 Tiki huts, 1 with completely equipped bar. Charming family, living & dining rooms. Beamed ceilings. 30' screened porch overlooking completely fenced grounds. Assumable 9½ Mtg. for $63,400. Owner will take back 2nd. It all adds up to something very special at $145,000. Allison Stacey & Associates, Realtor, 1420 Court Street, Clearwater, FL 33516. (813) 441-2432.

BRANDON NEW medical office, 1500 sq.ft. Full improvements, flexiable lease terms. Ready for occupancy. High growth area next to Brandon Hospital. Call Rick Jager, (813) 963-1961.

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ACMI Double Channel 200 cm. Colonoscope. Brand new - never been used. Will accept any reasonable offer. Call: (904) 373-6736.

TECA Model M, 2 channel, EMG equipment. 3 years old, excellent condition. $4,000. Contact: W.A. McElveen, M.D., 300 Riverside Dr. E., Bradenton, FL 33508.

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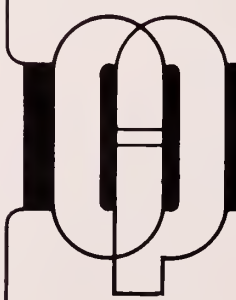
MARCH 19-20, 1983 — Advanced Cardiac Life Support Instructors Course. Provider Name: Emergency Medical Continuing Education Seminars Provider #:27MO509. 16 (sixteen) contact hours applied through the AMA, Category I of the Physicians Recognition Award. For further information call: EMCES Office (904) 396-5682.

APRIL 14-15, 1983: Advanced Cardiac Life Support Provider Course. Provider Name: Emergency Medicine Continuing Education Seminars. Provider #: 27MO509. 16 (sixteen) contact hours applied through the AMA Category I of the Physicians Recognition Award. For further information call: EMCES Office (904) 396-5682.

BIOFEEDBACK: An effective adjunct to the medical treatment of stress disorders. BIOFEEDBACK TRAINING for professionals offered by FULLIFE, INC. in Jacksonville Beach, Florida. Foundations of Biofeedback Programs: Designed to acquaint the entry-level individual with the fundamentals of biofeedback. 1983 schedule: (Sat.-Sun.) January 22-23, 1983, May 7-8, 1983. Two day cost $120.00.
ADVANCED BIOFEEDBACK WORKSHOPS: Designed for individuals with basic training in Biofeedback who are interested in advanced clinical applications. Portable biofeedback instruments will be provided for each participant for the duration of the workshop. 1983 schedule: (Fri.-Sun.) February 18-20, 1983, June 3-5, 1983. Three day cost $300.00. FULLIFE, INCORPORATED, 4080 Woodcock Drive, Suite 230, Koger Executive Center, Jacksonville, Florida 32207. (904) 398-5433.

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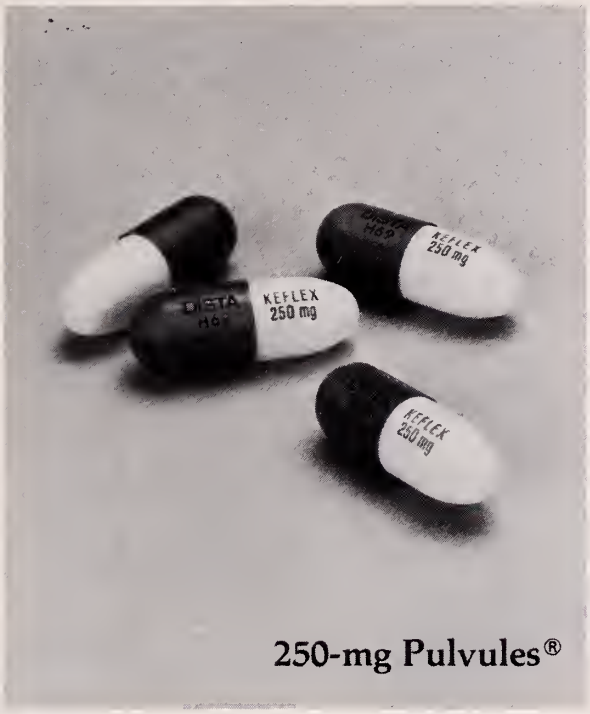


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References: 1. Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.,* operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.,* excitement, stimulation and hyperactivity.

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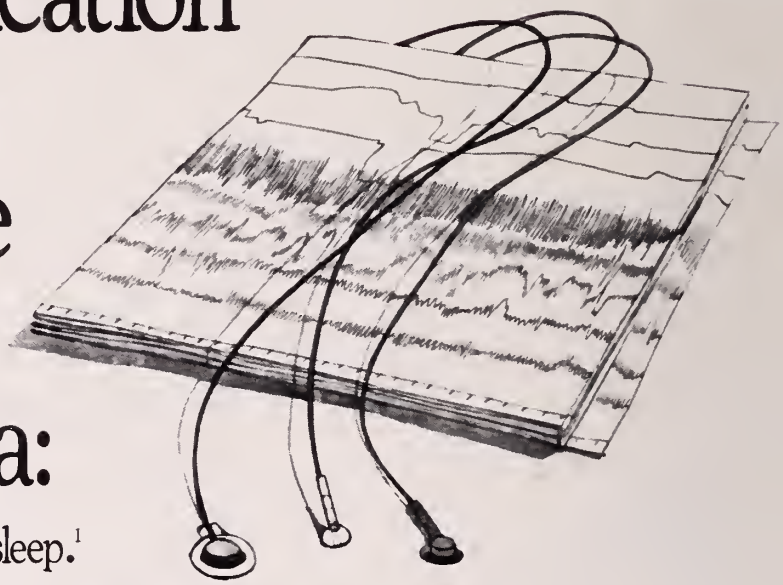
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Summary of the FMA Board of Governors Meeting January 14, 1983

The following is a summary of the major actions taken by the Board of Governors at its meeting January 14, 1983.

THE BOARD:

PSRO

Approved a recommendation to the House of Delegates at the 1983 FMA Annual Meeting in May that the FMA be authorized to submit through the Florida Medical Foundation a proposal to the Department of HRS by October 1, 1983 for the FMF to serve as the single statewide PRO in Florida under the newly enacted federal PRO legislation (Durenberger Bill).

HMO ADVERTISING

Approved the recommendation that FMA offer to support county medical societies' efforts in fighting deceptive advertising or other questionable activities used to solicit or promote the enrollment of patients in HMOs, including use of public funds to promote the use of HMOs over other forms of health care delivery and recommend the Florida Physicians Association as the most appropriate mechanism to provide assistance to the county medical societies; such assistance to be coordinated through the FMA and its legal counsel.

DUAL FEE SCHEDULES

Reaffirmed current FMA policy adopted by the House of Delegates in opposition to specialty screens (dual fee schedules) including authorization for FMA, if invited, to participate on behalf of the defendants in the lawsuit filed by the Dade County Society of Internal Medicine for the purpose of defending the position adopted by the House of Delegates.

FMIT PROGRAM

New Members Pre-Existing Conditions

Approved an amendment to the FMIT Plan Benefits booklet on page 9 regarding pre-existing conditions to provide: New members of the Florida Medical Association, Inc., are eligible to enroll themselves, their dependents, and any full time employees and their dependents under the Plan. The limitation of pre-existing conditions shall apply to members and their dependents and employees and their dependents.

FMIT Rate Increase

Received a report on the claims and utilization experience in the FMIT program and authorized an appropriate rate increase at the appropriate time to insure the continued solvency of the program.

DRUG PRESCRIBING BY OPTOMETRISTS

Approved continued support and assistance to the Florida Society of Ophthalmology in the legal and administrative proceedings currently being conducted regarding the prescribing of drugs by optometrists.

NATIONAL KEY CONTACT PHYSICIANS

Approved appointment of FMA National Key Contact Physicians for 1983 for Florida's 19 congressmen.

JUDICIAL COUNCIL

Enthusiastically approved the nomination of Robert J. Brennan, M.D., of Fort Lauderdale to the House of Delegates at the 1983 Annual Meeting for election to an additional 5 year term on the Judicial Council.

FLAMPAC

Approved re-appointment of the members of the Board of Directors of FLAMPAC with appointment of the Auxiliary representative to be determined in consultation with the President-Elect of the Auxiliary.

Florida Relative Value Studies

The Board received a report regarding the extensive number of procedure codes which have been added to the AMA CPT 4 through the 8th and 9th update since publication of the *1982 Florida RVS* and authorized publication of a revised edition of the *1982 RVS* to include these additional procedure codes as well as incorporate corrections to the original publication.

FMA FINANCES

The Board reviewed the Association's financial statements, unaudited, for the operation and activities of the Association for the year ending December 31, 1982 and directed that an increase in the FMA dues not be requested for 1984.

FMA JOURNAL EDITOR

The Board enthusiastically approved the President-Elect's nomination of

Daniel B. Nunn, M.D., of Jacksonville for reappointment as Editor of *The Journal of the Florida Medical Association, Inc.*, for 1983-84.

COUNCIL AND COMMITTEE REPORTS

The Board of Governors reviewed the reports and recommendations of FMA Councils and Committees and took the following actions:

AMA DELEGATES

Received as information the report of the Florida Delegation to the AMA regarding the actions of the AMA House of Delegates at its meeting December 5-8, 1982.

Increase in Delegates

As a result of a significant increase in the number of AMA members in Florida during 1982, the Association will have an increase from 8 to 10 delegates to the AMA in 1983. This increase places Florida among the top 8 states in terms of the number of delegates.

California	24
New York	20
Illinois	17
Texas	15
Pennsylvania	15
Ohio	14
Florida	**10**
Michigan	10

Southeastern Delegation

The Florida delegation continues to participate in the activities of the Southeastern Delegation which includes a caucus for the purpose of discussing the business to come before the House of Delegates and to consider cooperative efforts on issues of mutual concern. It is important to note that the strong support of the Southeastern Delegation which is comprised of 11 states, totalling 52 delegates, was a key factor in the successful election of Dr. Rufus K. Broadaway as a member of the AMA Board of Trustees at the 1982 Annual Meeting.

Florida Resolution

The Florida delegation introduced one Resolution calling for the AMA to strongly support national legislation limiting the liability of the manufacturer and administrator of vaccines. A Substitute Resolution encompassing the intent of the Florida Resolution as well as several others was adopted:

> RESOLVED, That the American Medical Association support appropriate state and federal legislation which would hold physicians and manufacturers harmless for adverse reactions to immunization required by state and federal law for prevention of communicable diseases, providing the immunizing agents are manufactured and administered without negligence.

House of Delegates Actions

The House of Delegates considered a wide range of subjects covering many aspects of medicine among which included:

- Health Policy Agenda for the American people;
- Proposed medical staff revision to the JCAH Manual;
- Peer Review Improvement Act of 1982;
- Implications of the Tax Equity and Fiscal Responsibility Act;
- Implementation of Diagnostic Related Groups (DRGs);
- Competition in medicine;
- Independent practitioners

(More detailed information regarding these and other actions of the House will be included in other FMA publications and newsletters.)

COUNCIL ON LEGISLATION

Reaffirmed professional liability reform as the Association's number one legislative priority and adopted the FMA's position regarding the following legislative proposals to be considered during the 1983 Legislative Session:

Endorsed legislation to:

- Enactment of legislation in Florida following the AMA Model Clean Indoor Act;
- Repeal of the Statute relating to physicians stating whether they accept Medicare assignments;
- Legislation developed in cooperation by FMA with the Department of HRS allowing for more flexibility in verification of trauma centers.
- A rewrite of the Physical Therapy Law, Chapter 486, Florida Statutes which retains the requirement for physician prescription of physical therapy services;
- Development of additional funding for public health programs and services including more practical solutions for distributing such funds;

- Raise the legal drinking age in Florida;

Opposition to Legislation:

- Which would require access to hospital outpatient diagnostic facilities by chiropractors.

In other actions, the Board:

- Approved that the FMA pursue a change in the rules of the State Board of Medical Examiners to address the problem relating to personal endorsement in lieu of presentation of an actual medical school degree for issuance of medical licenses;
- Directed that the FMA not seek changes in the Hospital Licensure Law 395.065(1);
- Approved that the FMA request the Governor to designate the Director of the State Health Program Office as the State Health Officer;
- Determined that the FMA take immediate action to develop a comprehensive Association response to the development of health care cost reform prior to the 1983 Legislative Session;
- Deferred adopting a specific legislative priority on changes in the Workers' Compensation Law until clearer identification is made of changes being proposed by other groups.

COUNCIL ON MEDICAL ECONOMICS

Hospital Staff Privileges

Expressed strong support of the AMA in its stand in opposing changes in federal hospital regulations regarding hospital staff privileges.

Alcohol and Drug Abuse

Commended the State of Florida on its alcohol and drug abuse program and offered encouragement for continued enforcement of these laws.

Tax Equity and Fiscal Responsibility Act

Expressed support of the AMA's opposition to the Tax Equity and Fiscal Responsibility Act of 1982 (S108 P.L. 97-248) and that the use of HMOs, PPOs, etc., be carefully monitored with respect to the quality of care.

COMMITTEE ON IMPAIRED PHYSICIANS

Confidentiality

Requested that the Council on Legislation consider appropriate safeguards to be included in legislation to insure confidentiality and exemption from liability for physicians who provide assistance in the treatment process.

Dues Waiver

Approved, in principle, the recommendation for a waiver of FMA dues for impaired physicians from the date they enter an approved treatment program until 6 months after conclusion of treatment. Such waiver being subject to the approval and recommendation of the physician's county medical society.

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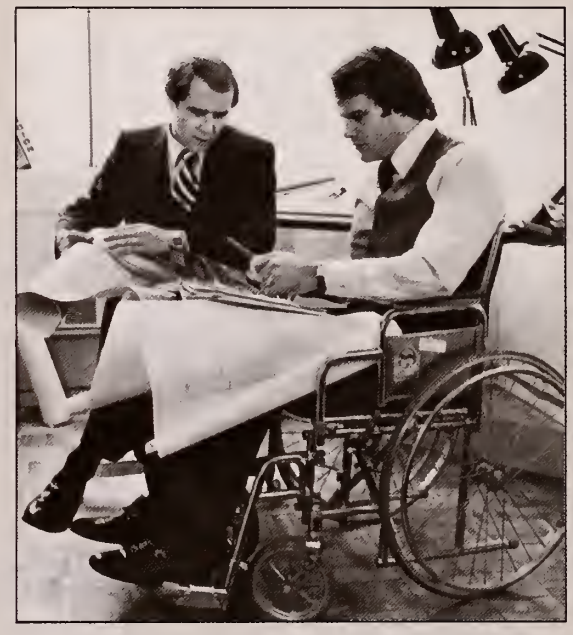
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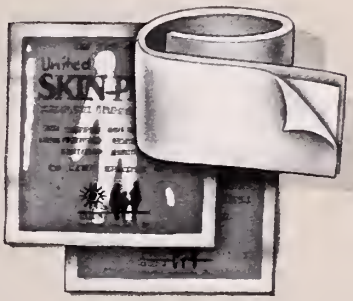
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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION, INC.

February 1983 Vol. 70, No. 2

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COVER

This month's cover of *The Journal* was designed and drawn by Andre Renard, M.D., a Plastic Surgeon practicing in Jacksonville. The cover illustrates man's encounter with the alligator as their two environments continue to encroach upon each other. The lead article "Alligator Bites and Related Infections" by A. Clark Raynor, M.D., et.al., graphically depicts the results of encounters with this dangerous reptile.

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1 National Interagency Council on Smoking and Health. *The Smoking Digest* Progress Report on a Nation Kicking the Habit 1977

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Indications: For relief of acute bronchial asthma and for reversible bronchospasm associated with chronic bronchitis and emphysema

Contraindications: Hypersensitivity; use with other xanthines.

Warnings: Status asthmaticus is a medical emergency. Excessive doses may be expected to be toxic.

Usage in Pregnancy: Safe use in pregnancy has not been established; do not use in pregnant women unless the potential benefits outweigh the possible hazards.

Precautions: Use with caution in patients with severe cardiac disease, hypertension, hyperthyroidism, acute myocardial injury, congestive heart failure, or peptic ulcer. Chronic high dosage is usually associated with gastrointestinal irritation.

Adverse Reactions:

Gastrointestinal—irritation, nausea, vomiting, epigastric pain, headache, hematemesis, diarrhea.

Central Nervous System—stimulation, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions, agitation.

Cardiovascular—palpitation, tachycardia, extrasystoles, flushing, marked hypotension, and circulatory failure.

Respiratory—tachypnea, respiratory arrest.

Renal—albuminuria, increased excretion of renal tubule and red blood cells.

Others—fever, dehydration.

Overdosage:

Symptoms—In infants and small children, agitation, headache, hyperreflexia, fasciculations, and clonic and tonic convulsions. In adults: nervousness, nausea, vomiting, tachycardia, and extrasystoles.

Therapy—No specific treatment. Discontinue drug immediately. Provide supportive treatment as indicated. Ipecac syrup for oral ingestion. Avoid sympathomimetics. Sedatives such as short-acting barbiturates help control CNS stimulation. Restore the acid-base balance with lactate or bicarbonate.

Drug Interactions: Toxic synergism with sympathomimetic bronchodilators may occur.

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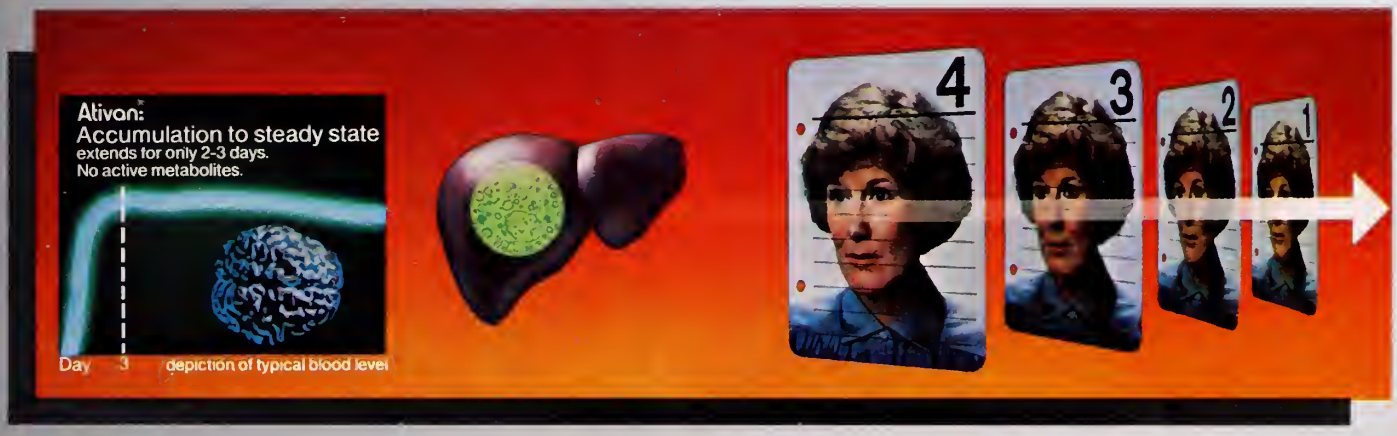
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References:
1 Klotz U, Reimann I. N Engl J Med *302*:1012-1014, 1980.
2 Desmond PV, Patwardhan RV, Schenker S, et al. Ann Intern Med *93*:266-268, 1980.
3 Patwardhan RV, Yarborough GW, Desmond PV, et al: Gastroenterology *79*:912-916, 1980.
4 Sellers EM, Naranjo CA, Peachey JE. N Engl J Med *305*:1255-1262, 1981.
5 Ruffalo RL, Thompson JF, Segal JL. South Med J *74*:1075-1078, 1981

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*Pharmacokinetics cannot as yet be directly related to efficacy
†All benzodiazepines produce additive effects when given with CNS depressants such as barbiturates or alcohol.

See important information on following page.

Ativan®
for (lorazepam) IV
Anxiety

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use (i.e., more than 4 months) has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence. Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals (e.g., drug addicts and alcoholics) should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown, but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS. Some patients have developed leukopenia, some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS. Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS. No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY. Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS. It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Ativan® for (lorazepam)® Anxiety

Dosage: **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

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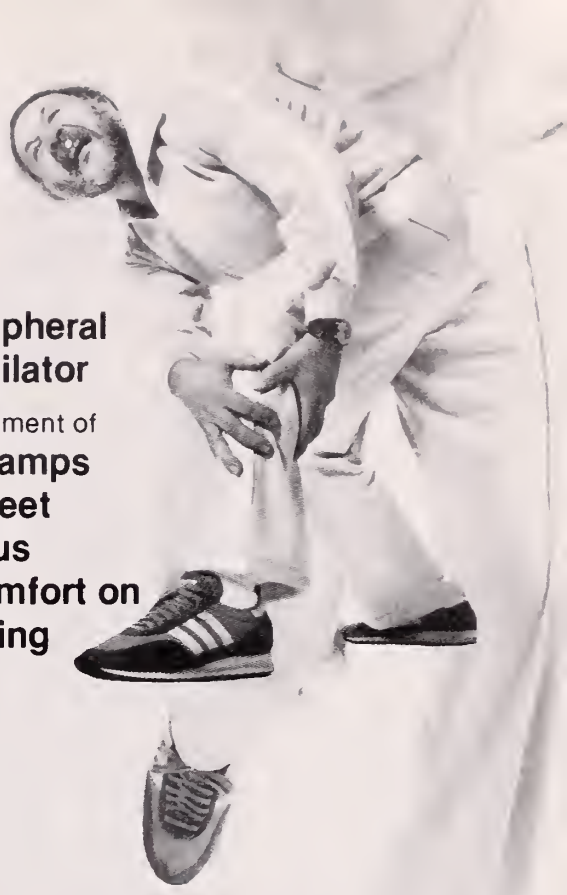
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Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

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Each blue tablet contains:
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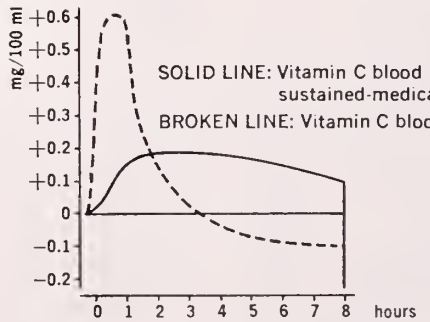
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*Comparison of ascorbic acid blood levels after administration of 1 gram of ascorbic acid in effervescent tablet form and 1 gram of CEVI-BID (2 capsules). *Adaptation

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1. Riccitelli, M.L.: Vitamin C Therapy in Geriatric Practice, J. Amer. Geriatrics Soc. 20:34, 1972.
2. Riccitelli, M.L.: Vitamin C—A Review. Conn. Med. 39:609, 1975

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PRESIDENT'S PAGE

A continuing need for volunteerism



Somebody asked recently what we would do if all of the hospital volunteers left their positions. Where would the extra money originate to do all the jobs within the hospital — deliver mail, answer telephones, transport patients, and many other necessary duties currently carried out by volunteers? Health care costs would escalate, indeed.

Although hospital volunteers are the best known to us, there is virtually no area within the community where the volunteer spirit does not exist. This is truly America. This is truly human nature — giving of oneself to help another.

One aspect of volunteerism that is so important to our profession is a large group of volunteer health agencies dedicated to research, plus public and professional education in specific disease entities. It is mind boggling to think of the millions of dollars raised by so many volunteers that go toward lessening disabilities and conquering diseases. Granted, many people do this because of their personal involvement with a specific disease which has either struck a loved one or themselves.

Voluntary health agencies provide monetary resources for research and education that return more for the dollar than any other source. To properly evaluate the best way to invest that money requires guidance and direction by physicians who know the system best. Volunteer laymen in these agencies are eager and grateful to have physicians working closely with them in making such decisions. It is gratifying to see the esprit de corps when medical and lay people work side by side to decide the fate of certain monies and to see the benefits derived from such a joint effort.

Unfortunately, it is discouraging to many laymen in certain instances to work hard and diligently for these goals only to find few physicians along side them to assist in these major decisions. The excuse "the doctor is too busy to spend time doing this" is a statement of the past. With data today showing an ever increasing number of physicians per capita and progressively less man hours expended per physician, it is difficult to justify the excuse "too busy".

Maybe it is time we look at our own role as a volunteer to see if we are doing our share. Changes in recent years from polls regarding physicians show that 62% of respondents are beginning to lose faith in physicians. 52-60% believe that physicians' fees are unreasonable, that physicians are in this profession to make money, and that physicians spend too little time with their patients. Surveys can be wrong but history is not. Years ago physicians dedicated time and volunteered hours of service to care for needy patients without recompence — a true volunteer effort. As a result of changing reimbursement procedures, this vast amount of volunteer activity has diminished. Today we are taking much more from the public than giving when it comes to medical service. Is it not time to reassess our pattern and maybe think about giving more back in order to demonstrate our appreciation of the voluntary activity in the community? I assure you that you will receive much self-satisfaction in seeing how your fellow citizens respond to your sitting side by side to work on mutual health matters—each one giving of himself to be of service. There is no better way to demonstrate our concern over the need for funds to support basic medical research for all diseases. Decisions to most wisely direct and guide such monies need medical input. Who else can do this but you? Especially when government support of medical research is declining there is no better opportunity for us to get on the volunteer bandwagon and put our teeth into a project related to a volunteer health agency's program.

Many of you reading this do much in this area and I apologize for not illustrating that. Yet all evidence indicates that you are in a minority of physicians committed to this type of service to mankind. Let us look to the silent *majority* who are becoming more obvious by their absence from the volunteer pool. I feel there is no physician who truly would not serve in such a capacity. It is just that he has forgotten the need for his service in this area.

As we come forward to reassume our volunteer role, let us not restrict it to volunteer agencies. The United Way in every American community needs more physicians' support — financial and personal

involvement. Red Cross, scouting, and many other worthwhile organizations make the list virtually endless. The number of physicians who can contribute also is virtually endless. As we increase our individual participation we also increase our collective contribution to so many needed causes.

At a time when economic conditions, social problems, and government disarray look gloomy for the future of our country, let us as individuals primarily dedicated to serving mankind for a healthier life demonstrate our individual efforts to volunteer wherever possible to help improve some of these conditions, the results of which otherwise could be deplorable. I hope you will begin joining the multitude of our fellow citizens who need us to be a part of the vast array of voluntary programs.

Robert E. Winston, M.D.

P.S. Our AMA membership goal in Florida for 1983 is only slowly increasing. Remember to get your dues in now for this very important aspect of our medical profession.

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References 1. Pitts NE, Migliardi JR: *Clinical Pediatrics* 13:87, 1974. **2.** Modell W: *Drugs of Choice* 1980-1981. C. V. Mosby Co., St. Louis, 1980, p. 362. **3.** Goodman LS, Gilman A: *The Pharmacologic Basis of Therapeutics*, 6th edition, MacMillan Publishing Co., Inc., New York, 1980, p. 1032.

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The Acquired Immune Deficiency Syndrome (AIDS): Of concern to us all

The recognition in 1981 of the increased occurrence of *Pneumocystis carinii* pneumonia and Kaposi's sarcoma in young and middle-aged male homosexuals in the United States drew immediate medical and public health attention. These two diseases, as well as several other opportunistic infections subsequently noted to be occurring with extraordinary frequency among homosexual males share in common a usual association with pre-existing cellular immune deficiency. Abusers of intravenous illicit drugs and heterosexual, non-drug abusing Haitian immigrants constitute two other groups also noted to be experiencing an increased incidence of these diseases.

It is now felt that the underlying immunological problem, leading to the particular array of diseases manifested by these patients, is caused by a transmissible agent which damages primarily the host's capability to maintain cellular, as opposed to humoral, immunologic defenses. It is very likely that in the near future most Florida physicians may face complex decisions pertaining to this condition, now called the Acquired Immune Deficiency Syndrome (AIDS). The number of cases reported to the CDC is rapidly approaching 1000 and the pace continues unabated. A review of AIDS seems timely, particularly in view of the article entitled, "*Pneumocystis carinii* pneumonia complicating Hemophilia A," found elsewhere in this issue.

The syndrome seems to become manifest in one of three forms: serious opportunistic infections; invasive Kaposi Sarcoma; or generalized, persistent, unexplained lymphadenopathy. Persons manifesting one or more of the forms of the syndrome have been found among all groups now identified as at risk. The prognosis appears to be worse for those AIDS patients who present with opportunistic infections.

A characteristic immunological abnormality in AIDS, detected through laboratory testing, is the reduction in the normal preponderance of circulating T-helper lymphocytes (T_h cells) as compared with T-suppressor lymphocytes(T_s cells). The reduction of the T_h/T_s ratio to less than 1.0 is cause for concern. Either a reduction in T_h cells or increase in T_s cells may cause such a reversal of the ratio. Depending on the direction and absolute magnitude of changes in the T-cell subpopulations, absolute lymphopenia may be detectable through the simple multiplication of the precent lymphocytes on differential by the white blood cell count.

Other alterations include a loss of *in-vitro* lymphocyte function in response to mitogens (Phytohemagglutinin, Concanavalin A, Pokeweed mitogen). Loss of *in vitro* response and loss of skin test responsiveness to antigens, to which the individual previously was responsive (mumps, trichophyton, candida, PPD), is also frequently found. All these tests are measures of delayed-type hypersensitivity which are correlated with cellular, or T-cell, immune function. Of considerable significance is the observation that immunoglobulin production, and antibody titers, continues to be maintained and that immunoglobulin levels (and titers) may rise somewhat.

The article by Ehrenkranz and Rubini in this issue describes the first case of a hemophiliac with *Pneumocystis carinii* pneumonia (PCP) associated with the current epidemic of AIDS. When first brought to the attention of the CDC by the authors in early 1982, they suggested that this case represented a new phenomenon in hemophilia. CDC began monitoring the incoming requests for medication from the CDC Parasitic Disease Drug Service to see if hemophiliacs were experiencing PCP. In June 1982 the first of several additional cases were discovered in this manner. Several of these latter cases will be described in detail in a forthcoming issue of the *Annals of Internal Medicine.*

The discovery of the involvement of hemophilia patients in the AIDS epidemic had tremendous impact on the conceptual framework of AIDS epidemiology. The groups already recognized as most characteristically at risk for AIDS: homosexual American males, IV illicit drug abusers and heterosexual non-drug abusing Haitian immigrants had few characteristics in common. All three groups, however, are known to be at risk for hepatitis B infection, presumably through sexual, close contacts, or through a vascular route.

The hemophiliacs with AIDS were scattered across the US and not concentrated in known AIDS-endemic areas. This suggested transmission by factor VIII concentrate, a nationally distributed commercial blood product and strengthened the suspicion that the routes of transmission of AIDS might be similar to those for Hepatitis B.

Several hemophilia treatment centers have now reported that many hemophiliacs have some degree of laboratory evidence of cellular immunologic deficiency. Preliminary evidence suggests that the Factor VIII concentrate therapy may be more strongly associated with the development of these immunological laboratory test abnormalities than the older, less practical, cryoprecipitate therapy. Whether these laboratory test abnormalities predict clinical manifestation, or outcome is unknown at present.

Several aspects of AIDS epidemiology complicate the epidemic investigation. Based on various sources of information, estimates for the incubation period of AIDS to range from 6-36 months with a median greater than one year. While laboratory testing of the clinical immunological status of suspect AIDS patients is useful it is not specific and the test results must be interpreted in the context of clinical information. It is also reasonable to expect great variation in individual responses and to expect that there may be some degree of innate or acquired resistance to AIDS. Even if exposure to an AIDS-related agent were to be established for large numbers of hemophiliacs or other identifiable groups one should expect that not all would develop clinically detectable disease.

The apparent spread of the epidemic via blood products, and perhaps via blood is of concern to patients, the health profession and the general public. The concern for health care workers and laboratory staff prompted the issuance by CDC of "Precautions for Clinical and Laboratory Staffs".[1] Based on the epidemiologic similarities in the modes of transmission between AIDS and Hepatitis B infection, it is felt that adoption of precautions suitable for prevention of transmission of Hepatitis B might be useful to curtail AIDS transmission. By analogy with Hepatitis B, more groups may yet become involved as is suggested by the recent report of several young children with a syndrome closely resembling AIDS. The reassuring aspect of the epidemiology is that transmission of AIDS through casual contacts must be extraordinarily rare.

The discovery of an agent and a convenient test will continue to be the object of a strenuous medical search. In the meantime, continued reporting of cases to CDC through the appropriate county and State Health Departments will facilitate all our efforts.

Reference

1. Centers for Disease Control. Acquired immune deficiency syndrome (AIDS): Precautions for clinical and laboratory staffs. MMWR, 31:577-580, 1982.

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Division of Host Factors
Center for Infectious Diseases
Centers for Disease Control
U.S. Department of Health
and Human Services
Atlanta, GA 30333

Metaphysico-theologo-cosmolo-nigology or unity?

In 1757 Voltaire published the immortal *Candide* which Anatole France called the finest short story in all literature. This satirical tale is a strange mixture of brillant fantasy and poignant truth, an unrivaled blending of ideal creation and worldly wisdom.

The story of the man called Candide has no pattern except the elementary pattern of constant change and violent contrast. There is a single dominating theme—the philosophical theory of optimism and Candide's belief in metaphysicotheologocosmolonigology, the belief that the world-order was intelligible, logical and the best of all world-orders.

How many physicians are purblind, insensitive, anaesthetized by customs, dullness, resignation and have Candide's optimism that our medical world-order is the best possible one?

Paraphrasing Abraham Lincoln's A House Divided speech of 1858: A house divided against itself cannot stand. The state medical associations cannot endure half AMA memberships. State and county associations cannot endure permanently with a minority of active and concerned and a majority of inactive and apathetic. The American houses of medicine: the national, state and county medical associations and the speciality societies and academies must cease being warring brethrens.

Disunity cannot be quelled by oratorical oil on troubled waters nor with flatulent editorials. We must have a creed of moderation and absence of fanaticism in our political programs. We must disdain extremism and never let abstract principles get in the way of compromise and adjustment. Controversies and confrontations must be minimized. Outlooks instead of being held dogmatically must be held tentatively and with a consciousness that new evidence may at any moment lead to their abandonment.

Physicians must present a united front to the non-M.D. enchroachment of the practice of

medicine. This encroachment is not the work of chance, a stupendous accident here and there, leaping into life full grown without father or mother. It is unity with dogged pertinacity that wins.

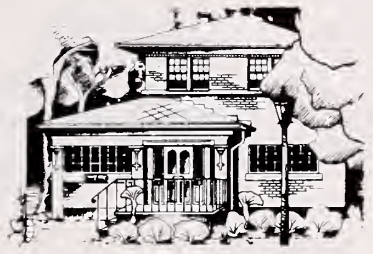
The sowing of seeds of discord and bad feelings between the warring speciality groups must end not through fire-and-brimstone rhetoric but through the sheer force of logic. The ideologies should be empirical, tentative and undogmatic. There should be no immutable dogmas in any house of medicine.

In the quest for unity, physicians must avoid oscillation between extremes of crusading and of abdication and between impetuosity and naiveté. Leave all conjecture and collateral questions to the arbitrament of reason under the mutations of time. The wounds in the houses of medicine can be healed with malice toward none.

Many houses of medicine function simultaneously and abrasively not necessary for the common good but rather in terms of how they see the common good reflected from their perspectives and proprietary concerns. The ultimate proprietary interest should be that of the totality—the profession of medicine. What is needed is serious and reasoned discourse, the genuine listening to varying perspectives. Ultimately a reasonable reconstruction and perhaps a blueprint for effort and responsibility will emerge.

Our medical world-order is not—metaphysico-theologo-cosmolo-nigological—it is not the best possible one. We must wake up the Rip Van Winkle M.D.'s. We cannot survive disunited with loss of spirit and determination and inactivity. Only with unity can we grow accustomed to devising new solutions to unprecedented situations.

Edward Pedrero Jr., M.D.
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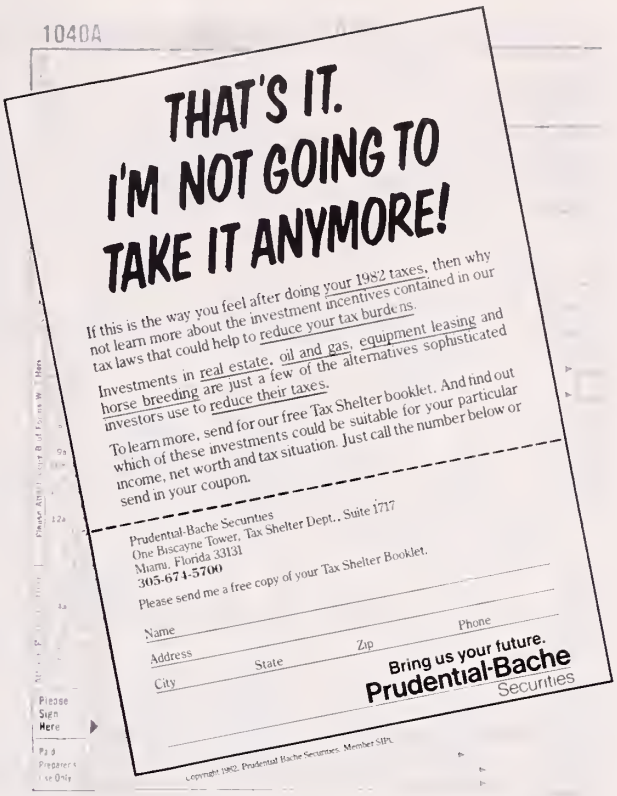
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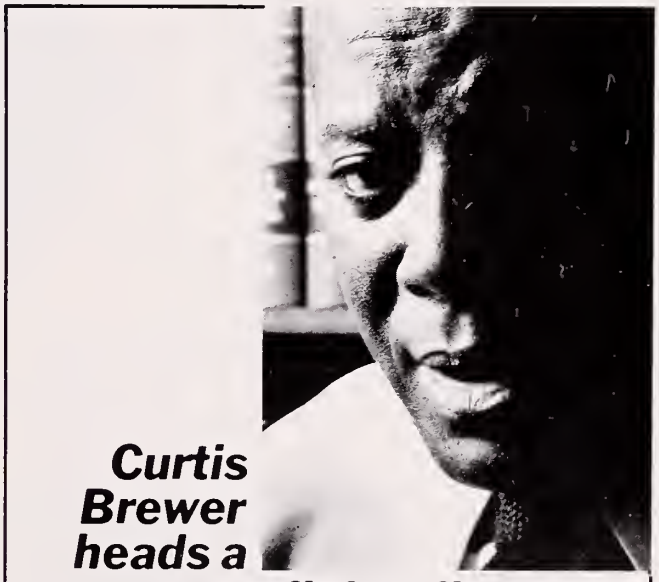
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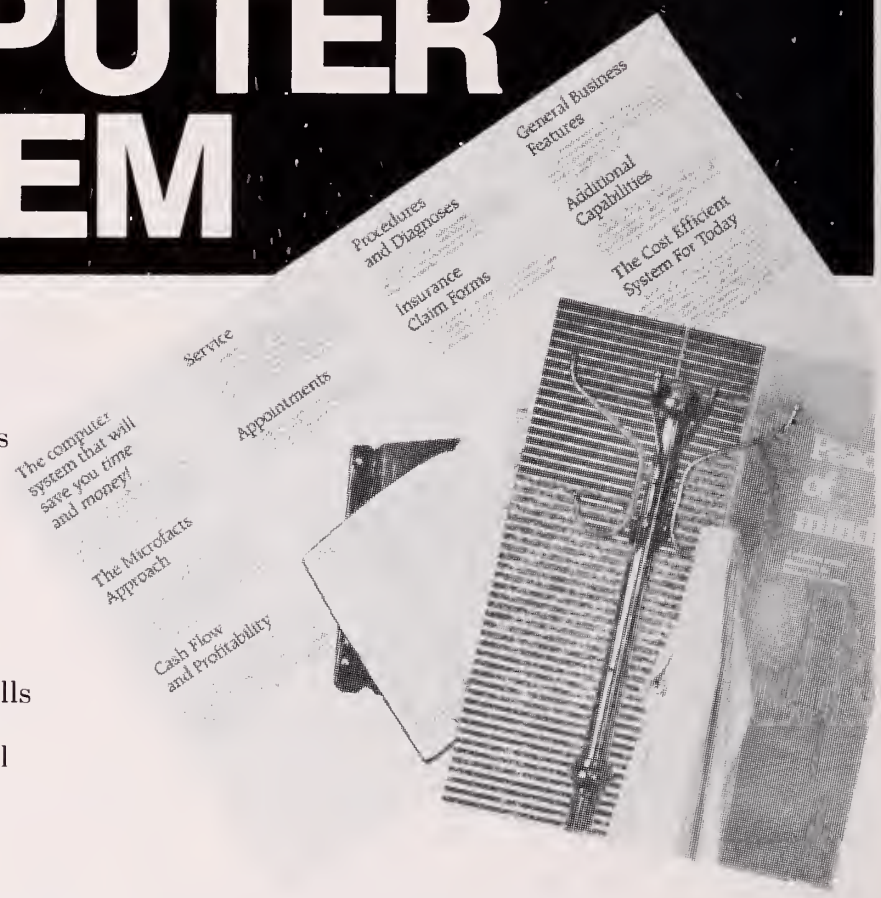
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Alligator bites and related infections

A. Clark Raynor, M.D.; Hal G. Bingham, M.D.; H. Hollis Caffee, M.D. and Paul Dell, M.D.

ABSTRACT: Two cases of serious alligator attacks and injuries are described. With the return of alligators in increasing numbers and man's continued encroachment on the natural habitat and environment, alligator attacks appear to be increasing. Certainly, one would be well advised to avoid provoking the alligator and treat the animal with cautious respect. A gram negative organism, Aeromonas hydrophila, which is endemic in Florida's lakes and ponds, and especially eutropic areas, has been described and should be considered in alligator bites and other water related injuries.

Alligator bites are infrequent but reports in the literature[1,2] are increasing. An alligator may bite at random but usually it is in courtship or an attempt is being made to protect its young.[3,4] The two cases reported in this paper may have been from attacks when the alligator was attempting to protect its young. One attack occurred near a backyard golf course pond and the other in a university owned and operated lake. Both attacks involved the upper extremities and the patients saved themselves by fighting back either with their contralateral upper extremity or both lower extremities. Both cases also cultured Aeromonas hydrophila which is found frequently in eutropic lakes and ponds and may cause serious or fatal infections unless recognized and treated appropriately.

Report of Cases • Case 1.—The 20-year-old, white, male college student sustained severe wounds of the right upper extremity from an alligator who attacked him three or four times as he attempted to swim out to a capsized boat in Lake Wauberg of the University of Florida. The patient was rescued by a nearby sailboat crew and subsequently brought to Shands Hospital about five miles away.

He was stabilized in the emergency room and the initial evaluation demonstrated a completely avascular right hand that remained attached to the forearm by a few flexor tendons, median nerve, and ulnar artery and nerve. The distal 6-8 centimeters of the right radius and ulna just proximal to the wrist joint and overlying soft tissue were absent. He also had sustained a compound-comminuted fracture of the distal half of the humerus just to the supracondylar region with open skin and muscle over 5-6 centimeters with bone protruding (Figs. 1, 2, 3).

Debridement of nonviable forearm muscle, skin, and tendons was carried out initially by the Plastic Surgery Service. The distal radial metaphyseal fragment was approximated to the remaining diaphysis and reduction maintained with an external fixator by the Orthopedic Service. The

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Fig. 1.—X-ray of right hand with transected and dislocated distal radius and ulna.



Fig. 2.—X-ray of right hand in lateral projection with dislocated and absent distal radius and ulna.

humeral fracture was irrigated and debrided and alignment maintained by traction through an olecranon pin following revascularization of the hand (Figs. 4, 5).

Vein grafts were harvested from the dorsum of the right foot and microvascular reapproximation of the radial artery with vein graft interposition was accomplished. The ulnar artery did not demonstrate flow until the radial artery was revascularized. Upon completion of the artery revascularization, the hand improved in color and temperature. Vein reconstitution was next accomplished on the volar side of the wrist with two vein grafts. Flow was demonstrated in both veins before closure of the soft tissue in a circumferential manner with the remaining distal and proximal tissue.

Postoperatively, the patient did well with adequate vascular flow to the hand. Gram negative rod organisms grew out in culture and isolation demonstrated Pseudomonas, Serratia, and Aeromonas hydrophila.[5] The patient had been placed on Kefzol and tobramycin which appeared to give satisfactory coverage. Hyperbaric oxygenation was considered for treatment of possible anaerobic organisms but none grew on culture.

A second-look operation was done six days later and although there was some drainage, no evidence of induration, cellulitis, or gas was seen. At approximately ten weeks post-injury, there is little roentgenographic evidence of bony healing of both the radius and humerus.

Case 2.—The patient, a 71-year-old, white male, was attacked by an alligator while cleaning a ditch bank in his back yard located on the golf course in Port St. Lucie, Florida. The patient had observed the alligator in that area and, in fact, had fed it on occasions. Reportedly, some young alligators had been seen in the vicinity indicating a probable nest nearby. The attack came with lightning rapidity causing multiple lacerations of the face and neck regions with a large right frontal-parietal flap exposing the skull. The left wrist was dislocated and unstable with a near-circumferential laceration exposing the extensor and some of the flexor tendons. The extensor carpi radialis and flexor carpi ulnaris were partially transected and the extensor pollicis longus was completely avulsed with the muscle belly exposed in the wound (Figs. 6,7). The remaining extensor tendons were redundant from the stretch of the hand.

Fortunately, the patient had the forethought to gouge the alligator's eyes with his right hand while the left hand was being held in the alligator's mouth, facilitating release and escape into his yard.

Following appropriate resuscitative measures in the emergency room at Martin Memorial Hospital, the patient underwent debridement and closure of multiple facial wounds with open reduction, debridement and closure of the left wrist injury. On the fifth postoperative day, a wound infection was noted underlying the dorsal skin which cultured Aeromonas hydrophila and Enterobacter.



Fig. 3.—X-ray of distal right humerus comminuted just proximal to the epicondyle.



Fig. 4.—Replanted right hand—approximately six weeks post-bite.

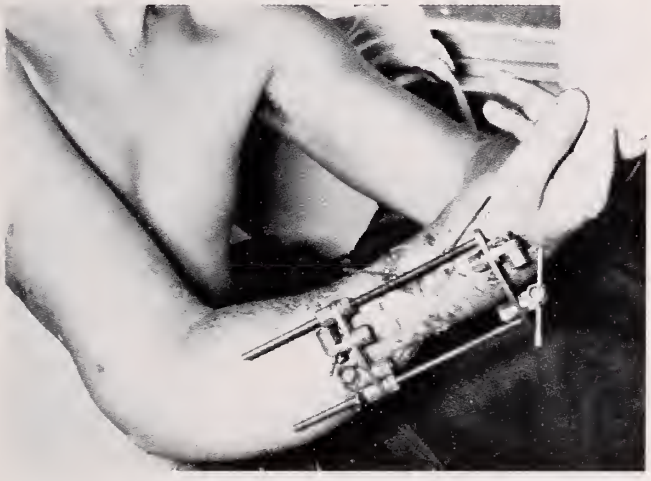


Fig. 5.—Replanted right hand—demonstrating the Hoffman apparatus approximating the proximal carpal bones to the radius.

Continuous catheter irrigation with gentamycin solution as well as intravenous gentamycin therapy was instituted for six days with marked improvement (Fig. 8). Edema and stiffness of the joints proved to be difficult problems necessitating physical therapy, Jobst insufflation treatments, appliances, splints, and Jobst glove to rehabilitate the hand.

Approximately two months following the injury, the patient underwent intravenous Solu-Medrol therapy under tourniquet control with manipulation of the joints. Marked improvement in the edema and range of motion followed and at five months post-injury, satisfactory function was noted with approximately 15 degrees of limitation in MP extension and near normal PIP function. Wrist extension was limited to 15-20 degrees but was pain-free. The patient ultimately was able to return to playing golf but left the yard work to more qualified individuals.

Discussion • The alligator population in the Sun Belt has varied over the years, depending upon state law and permission to hunt them. In Florida, a "come-back" has been witnessed in alligators because of restricted hunting laws. More recently



Fig. 6.—Dislocated and unstable left hand with extensive lacerations and avulsions.



Fig. 7.—X-ray of left hand showing dislocation and angulation.



Fig. 8.—Wound infection with antibiotic catheter irrigation at 11 days post-injury.

selected individuals have been allowed to hunt in overpopulated areas. In Florida, rangers of the State Game and Wildlife Department have always been called upon to relocate alligators that have become a nuisance. It is well known that small animals are unsafe in areas where alligators are known to be.

Reported attacks seem to be increasing. Recently on the Loxahatchee River a large alligator crawled over the legs of a man to swallow a large German shepherd dog with lightning speed.[6] Once provoked, the reptile is quite vicious and with its powerful jaws can easily transect extremities or torsos. The trick is to prevent the alligator from opening its mouth; the muscles elevating the jaw are weak. When alligators are on display, the "caretakers" make a special point of approximating the jaws of the animal by grasping them with their fists. They also avoid the powerful tail which can lash or whip around with significant force.

The micro organisms that grow in a gator's mouth are typically gram negative belonging to the salmonella species or a marine organism called Aeromonas hydrophila.[7,8] Other organisms cultured yielded Clostridium species, enterococci and citrobacter.[9]

In studies on reptiles, the Aeromonas is found to be endemic in alligators' mouths and surrounding waters, but usually causes little harm unless their environment changes. Salmonellosis is usually subclinical in reptiles and probably is saprophytic with 94% of all reptiles harboring salmonella. When the environment does change, such as eutrophication of lakes and ponds with low dissolved oxygen content and enriched organic waste, these Aeromonas organisms which are considered part of the normal flora of most water systems become pathogenic for both warm and cold blooded vertebrates.[10] Although infections caused by Aeromonas hydrophila are commonplace among fish and amphibians, this organism is not commonly appreciated as being a significant human pathogen. Aeromonas infections have followed injuries incurred in fresh and salt water and also alligator bites.[11,13] The gram negative organism has many morphologic biochemical similarities to the Enterobacteriaceae, especially Serratia and Escherichia coli. The Aeromonas species are members of the vibrionaceae family and are facultative anaerobic asporogenous flagellative gram negative rods.[14]

Aeromonas infection may present as bullae with areas of erythema and cellulitis at the site of injury and even distant sites. Large areas of necrosis rapidly develop in these areas with progressive cutaneous and subcutaneous necrosis and separation. This organism is reported to have been responsible for many severe infections after the commercial jet plane crash in the Florida Everglades. Antibiotic therapy should include an aminoglycocide if Aeromonas is suspected. Though uncommon, another organism that presents with almost identical clinical picture of infection is the noncholera vibrio species, particularly Vibrio vulnificus and Vibrio alginolyticus, which are usually found in the coastal marine environment.[15]

References

1. Hines, T.C. and Keenlyne, K.D.: Alligator Attacks on Humans in Florida, Annual of U.S. Fish and Wildlife Service, Casper, Wyoming, S.E. Assoc. of Game and Fish Commission, 13th Conf. p. 358, 1976.
2. Hines, T.C. and Keenlyne, K.D.: Two Incidents of Alligator Attacks on Humans in Florida Am Soc. Ichthyologists & Herpetologists, COPEIA 4:736 (Nov.) 1977.
3. Porter, K.P.: Herpetology, Chapter XII, Reproductive Adaptations of Reptiles Philadelphia, W.B. Saunders Co., 1972
4. Goin, C.L. and Goin, O.B: Introduction to Herpetology San Francisco, W.H Freeman, 1962.
5. Gordon, R.W.; Hagen, T.C.; Esch, G.W., and Fliermans, C.G: Isolation of Aeromonas hydrophila from American Alligator, Alligator mississippiensis, J. Wildlife Dis 15:239, 1979
6. English, M.: Eating Dog Was Big George's Big Mistake. The Jupiter Courier-Journal, A-1, July, 1982
7. Chisdini, R.J. and Sundberg, J.P.: Salmonellosis in Reptiles: A Review, Am. J Epidemiol. 113:494, 1981
8. Marcus, L.C.: Infectious Diseases of Reptiles, J. Am Veterinary M.A. 159:1626, 1971
9. Doering, E.J., Fitts, C.T.; Rambo, W.M., and Braddham, G.B. (eds.): Alligator Bite, JAMA 218:255, 1971.
10. Shotts, E.B. Jr.; Gaines, J.L. Jr.; Martin, L., and Prestwood, A.K.: Aeromonas Induced Deaths Among Fish and Reptiles in Eutrophic Inland Lake, J. Am. Veterinary M.A. 161:603, 1972.
11. Fulghum, D.D., Linton, W.R. Jr., and Taplin, D.: Fatal Aeromonas hydrophila Infection of Skin, Sout M.J., 71:739, 1978.
12. Hanson, P.G.; Stanridge, J.; Jarrett, F., and Maki, D.G.: Fresh Water Wound Infection Due to Aeromonas hydrophila, JAMA 238:1053, 1977.
13. Rosenthal, S.G.; Burnhart, H.E., and Phillips, J.A. III.: Aeromonas hydrophila Wound Infection, Plast Reconstr Surg 53:77, 1974.
14. Buchanan, R.E. and Gibbons, N.E. (eds.): Bergey's Manual of Determinative Bacteriology (8th ed), Baltimore, Williams and Wilkins Co., 1974.
15. Blake, P.A.; Weaver, R.E., and Hollis, D.G.: Diseases of Humans (Other than Cholera) Caused by Vibrios. An Rev. Microbiol. 34:341, 1980.

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North American blastomycosis in Florida
Report of three cases

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ABSTRACT: North American Blastomycosis is an uncommon disease which has most frequently been seen in the Southeast, Mid-Atlantic states and Great Lakes Region. It is relatively more rare in Florida. A case report details one of three cases seen in the past twenty-four months at the VA Medical Center, Bay Pines, Florida.

North American blastomycosis is an uncommon disease which occurs most frequently along the Mississippi and Ohio Rivers and around the Great Lakes.[1] Cases indigenous to Florida have been reported rarely. Over the past two years we have seen three culturally proven cases in individuals who have lived in Florida continuously for many years. In each of these, the lungs were actively involved supporting the concept of acquisition of the infection by inhalation. In one case the prostate was also involved, in another only the lungs appeared to have been affected. The third case exhibited multisystem involvement and is reported here in some detail.

Report of Case ● A 56-year-old sewage treatment plant supervisor and amateur scuba diver, who has lived in the Fort Myers area for the past ten years, noticed pain in the left foot about six weeks prior to admission. A clinical diagnosis of gout was made and he was treated, but without relief. Subsequently, other areas of the foot became tender and dark pustules developed on both feet and hands and were extremely painful. Two weeks prior to admission, a gram stain of one lesion revealed gram positive cocci. An x-ray of the left foot revealed changes of the metatarsus consistent with osteomyelitis. He was treated with ampicillin without any benefit. Because of continued painful sores, fever and malaise, he was referred to the VA Medical Center, Bay Pines, for hospitalization.

Physical examination revealed a well-developed white man who appeared acutely ill with very painful hands and feet. He was alert and cooperative. Examination of the eyes including funduscopy revealed no abnormalities. The chest was clear to percussion and auscultation. The heart was normal, the abdomen soft and there was no organomegaly. The genitalia exhibited a painful, enlarged left testicle. Extremities revealed white pustules with black central areas on both hands and feet and there was redness and tenderness over the right ankle (Figs. 1-3). The feet were quite tender. The temperature was 99 F on admission.

Laboratory examinations—These included a white blood cell count of 16,100; the differential revealed 52% segmented polymorphonuclear, 17% band forms, 20% lymphocytes, 6% monocytes, 4% basophils, and 1% eosinophils. The hemoglobin was 11.9 gm% and the

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hematocrit 34.6. A urinalysis was within normal limits. Blood chemistries (SMAC) were normal. A VDRL was negative as were febrile agglutinins. An electrocardiogram was within normal limits. The chest x-ray revealed diffuse, nodular infiltrates scattered throughout both lungs especially in the apical areas where there were some calcified granulomas (Fig. 4). Serology for *Blastomyces dermatitidis* was positive 1:8 and 1:16 on several occasions. On the other hand, serology for *Histoplasma capsulatum*, "GW" yeast and "VC" yeast was negative, complete fixation was 1:8 and 1:16 on several occasions. Serology for *Candida albicans* and *Coccidioides immitis* converted from negative to positive.

Hospital Course—The patient was started on oxacillin intravenously after cultures of the pustules were taken. There was minimal response to this therapy and on the fifth hospital day biopsy of the lesions on the hand revealed an organism compatible with *Blastomyces dermatitidis* (Fig. 5). On this same day examination of cultures revealed growth of the fungus. The patient was started on amphotericin B and within days symptomatic improvement had occurred and regression of the lesions initiated (Fig. 6). A lesion which appeared on the nose on the third hospital day had completely disappeared by the fifth day of treatment. Because of the development of a moderate azotemia and a rise in creatinine (BUN 59, creatinine 1.8), mannitol 25 gm was administered with each dose of amphotericin B. There was no further impairment of renal function with the BUN stabilizing at about 49 and the creatinine at 1.8. The potassium remained at 4.6 throughout treatment. Within several days after initiation of treatment, the patient showed subjective improvement, with gradual resolution of pustular lesions, decrease in scrotal swelling, and a decrease in the pulmonary infiltrates. He received a total of 2,028 mg of amphotericin B and was discharged on the 50th hospital day. At the time of discharge, the patient felt well except for stiffness in the hands; he also had residual crusting of the lesion on the lateral aspect of his foot (Fig. 7) and scaling at the site of other lesions. Bone and brain scans were negative. The BUN was 51 and the creatinine 2.0; An erythrocyte sedimentation rate was 39.

Follow-up—Two weeks after discharge, the BUN was 21, creatinine 1.1, and the chest x-ray revealed further clearing of infiltrates. The patient returned to work at this time. Three months later, the erythrocyte sedimentation was 29, BUN 29, creatinine 1.0, and there was almost complete clearing of the chest x-ray. At eight months, the patient continued to feel well with less stiffness in his hands, and the chest x-ray revealed further clearing of infiltrates (Fig. 8). One year after discharge, the patient feels well, but there is slight stiffness of the fingers and minimal erythema over the site of the toe lesion. The blood chemistries are all normal with a BUN of 21, creatinine 1.1, and an erythrocyte sedimentation rate of 21. A chest x-ray reveals pleural scars and calcified granulomata in both apices and diffuse emphysematous changes with no evidence of infiltrates.



Fig. 1.—Hands of patient exhibiting hemorrhagic pustular lesions.



Fig. 2.—Close-up of hemorrhagic pustular lesion on the index finger.

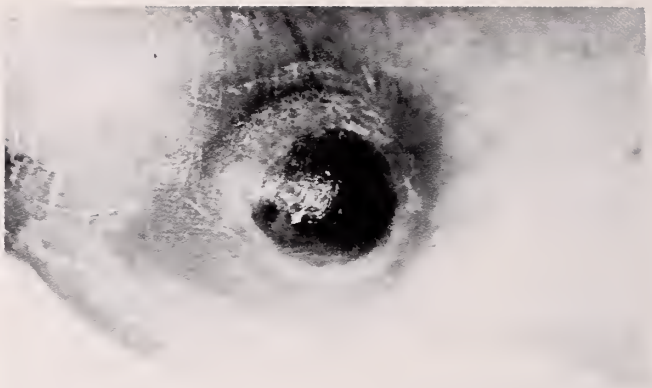


Fig. 3.—Close-up of lesion on the lateral aspect of the metatarsal area of the left foot.

Discussion • North American blastomycosis is a chronic granulomatous infection caused by the fungus *Blastomyces dermatitidis*. It was first reported by Gilchrist in 1894 and for years was thought to be restricted to the North American continent and limited to certain regions. At one time it was labeled the Chicago Disease.[1,2] The disease has now been reported worldwide and is found throughout the North American continent although the majority of cases are seen in the Ohio, Missouri, and Mississippi River basins, and the Great Lake

regions as well as the Mid-Atlantic states.[1,3] Mortality in treated cases is still 8%, especially if infection has been present and unrecognized for a long period.[4] North American blastomycosis is rare in Florida but nevertheless is present as documented in three cases seen in the past 24 months. Even if it is postulated that our cases represent reactivation of old healed disease the fact remains that they presented clinically outside a usual epidemic area and the diagnosis had to be considered.

One patient exhibited multiple system involvement with diffuse infiltrates in the lungs, epididymitis, cutaneous pustules and early bone involvement. Fortunately, these all resolved with treatment. Serological testing yielded positive titers for *Blastomyces dermatitidis, Histoplasma capsulatum, Candida albicans and Coccidioides immitis.* Since the patient had lived many years in the Mississippi River basin prior to moving to Florida, it is possible that he had histoplasmosis in the past and the serology reflected inactive disease. However, it is well known that cross reactions do occur among the various fungi. Although serology may be helpful, this patient illustrates the need for culture and/or tissue proof of infection.[4]



Fig. 4.—Chest x-ray on admission to the hospital. Note the fine fibronodular infiltrate.

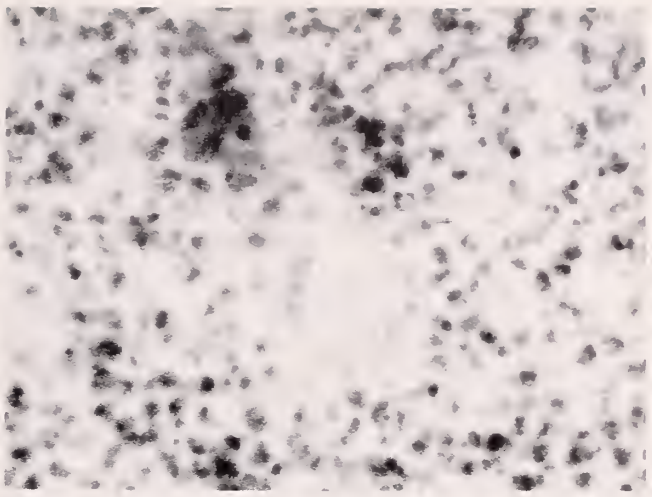


Fig. 5.—Frozen section of biopsy of one of the lesions showing a budding fungal form consistent with Blastomyces dermatitidis.



Fig. 6.—Crusting and drying of lesions following initiation of treatment with amphotericin B.

Nephrotoxicity due to amphotericin B is well known. Rosch et al reported the usefulness of concomitant mannitol administration to combat this problem.[5] In our case, a further rise in BUN and creatinine was apparently forestalled by using this modality. Other than occasional chills and phlebitis at the injection site, our patient tolerated therapy rather well. Phlebitis and its development were minimized by application of warm soaks immediately after administration.

The three culturally positive patients with North American blastomycosis we have seen lived exclusively in Florida for several years. The disease should be considered when the etiology of symptoms and signs is not immediately apparent. Since the infection can involve almost any organ including the skin,[3] lungs,[4] bone,[1,6] brain,[1] adrenals[4] and as in one of our cases the prostate,[9] neither geography nor organ distribution automatically excludes this diagnosis. Adrenal insufficiency can occur as a result of invasion of the adrenals by the



Fig. 7.—Crusting and early healing of the lesion shown in Fig. 3.

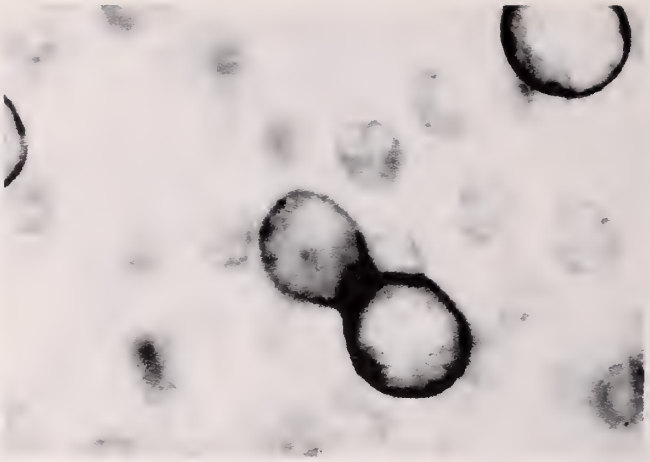


Fig. 9.—Characteristic Blastomyces dermatitidis in one of the fixed specimens from the biopsy.

organisms.[4,7,8] Biopsy or culture proof of infection is preferred as serological testing may not be helpful in the individual case.

Treatment with ketoconazole may be as effective as amphotericin B as evidenced in our second case in which pulmonary infiltrates completely cleared after four months of treatment. This patient was otherwise asymptomatic and a trial of ketoconazole seemed a reasonable alternate to amphotericin B. It is interesting that blastomycosis was first suspected when sputum cytology revealed organisms of *Blastomyces dermatitidis*, which subsequently cultured out when specimens were submitted for fungal culture. The cytologic diagnosis of blastomycosis has recently been discussed by Trumbull and Checney.[10]



Fig. 8.—Chest x-ray eight months after treatment. The infiltrates are almost completely gone. A calcified lesion and some apical scarring are noted.

Blastomycosis of the urogenital tract including the prostate has been previously reported.[9,11,12] One of our cases had pulmonary involvement with positive cultures. A prostate biopsy done to rule out a malignancy showed *Blastomyces dermatitidis* in sections. This patient elected to return to his private physician for treatment and has been lost to follow-up.

The first cases of urogenital blastomycosis were reported by Moore and Halperin in 1948.[9] These were 14 cases involving the prostate gland. In 50% of these only the prostate was implicated, whereas in the remainder the kidney and/or the epididymis was also involved. According to Malin, Michigan and Bissada treatment with amphotericin B is successful in most instances.[11,12,13]

Summary ● North American blastomycosis does occur in Florida, though uncommonly so, consequently, it should be considered in patients presenting with symptoms and signs of pulmonary, cutaneous, adrenal, cerebral, bone and/or urogenital disorders in whom an etiology is not immediately apparent. Blastomycosis can be treated successfully in most cases. Amphotericin B is the drug of choice. Ketoconazole may be an acceptable alternative in patients intolerant to amphotericin B or in whom the disease appears limited.

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References

1. Duttera, Jr. M.J. and Osterhout, S.: North American Blastomycosis Survey of 63 Cases, South. M.J. 62:295-301, 1969.
2. Kitchen, M.S.; Reiber, C.D., and Eastin, G.B.: Urban Epidemic of North American Blastomycosis, Am. Rev. Resp. Dis. 115:1063-1066, 1977.
3. Logsdon, M.T., and Jones, H.E.: North American Blastomycosis-A Review, Cutis 24:524-527, 532-535, 1979.
4. Drutz, D.J.: North American Blastomycosis, in Cecil Textbook of Medicine, pp. 1701-1702, Wyngaarden, J.B. and Smith, L.H. Jr. (Eds.). W.B. Saunders Co. 1982.
5. Rosch, M.J.; Pazin, G.J., and Firemen, P: Reduction of Amphotericin B Nephrotoxicity with Mannitol, JAMA 235:1995-1996, 1976.
6. Detrisac, D.A.; Harding, W.G.; Greiner, A.L.; Dunn, C.R., and Mayfield, F.H.: Vertebral North American Blastomycosis, Surg. Neurol. 13:311-312, 1980.
7. Eberle, D.E.; Evans, R.B., and Johnson, R.H.: Disseminated North American Blastomycosis, Occurrence with Clinical Manifestations of Adrenal Insufficiency, JAMA 238:2629-2630, 1977.
8. Chandler, P.T.: Addison's Disease Secondary to North American Blastomycosis, South. M.J. 70:863-864, 1977.
9. Moore, M. and Halperin, L.K.: Blastomycosis Involving the Prostate: Report of Two Cases, One With and One Without Cutaneous Lesions, J. Urol. 60:612-622, 1948.
10. Trumbull, M.L. and Checney, T.Mc.: Cytological Diagnosis of Pulmonary Blastomycosis, JAMA 245:836-838, 1981.
11. Malin, Jr. J.M.; Anderson, E.E., and Weber, C.H.: North American Blastomycosis of Urogenital Tract, J. Urol. 102:754-757, 1969.
12. Michigan, S.: Genito-Urinary Fungal Infections, J. Urol. 116:390-397, 1976.
13. Bissada, N.K.; Finkbeiner, A.E., and Redman, J.F.: Prostatic Mycosis-Nonsurgical Diagnosis and Management, Urology G. 327-328, 1977.

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Pneumocystis carinii pneumonia complicating hemophilia A

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ABSTRACT: A hemophiliac man with lymphopenia and skin test anergy was found to have Pneumocystis carinii pneumonia. He had no known predisposing immunosuppressive disease. He was not a homosexual or drug abuser. We postulate that he acquired cellular immunosuppression as a result of treatment with Factor VIII concentrate. We propose that a transmissible agent causing immunosuppression was present in the plasma of one or more donors, and this agent contaminated the large pool or pools of plasma used to make the commercial Factor VIII concentrate that he received.

Pneumocystis carinii pneumonia characterized by heavy alveolar infiltration of the organism may be taken to be a consequence of profound immunosuppression.[1] Recently, T lymphocyte dysfunction and immunosuppression associated with pneumocystis infection as well as other grave disorders have been described among homosexual men in certain cities, in persons who are parenteral drug abusers,[2,3] and in Haitian immigrants.[4] We now report a hemophiliac man treated with commercial Factor VIII concentrate who died from overwhelming pneumocystis pneumonia in the absence of any known predisposing immunosuppressive disease.

Case Report ● In late November, 1981, the patient was admitted for elective replacement of knee prostheses. He was a 62-year-old executive who had been under treatment for hemophilia A for many years. Hemarthrosis and scarring led to bilateral knee joint replacement with prostheses four years earlier. A recent increase in pain and limitation of motion of both knees had occurred. The patient regularly used commercial Factor VIII concentrate at home which he generally obtained from one New York hospital blood bank. He had hepatitis a number of years before. Ten months previously fatigue, anorexia and abnormal liver functions had developed which were attributed to another episode of hepatitis. These symptoms cleared in the two to three months prior to admission and his liver function tests improved. The patient had been married more than 20 years and had two sons. According to his family he was not known to be homosexual or a drug abuser. The patient had been a moderately heavy smoker for many years. A chest x-ray in February 1981 was unremarkable. Born in Greece, he came to the U.S.A. at the age of 10.

At admission he was a cheerful man in no apparent respiratory distress who walked with a cane. He was anicteric and had no spider angioma. The chest examination revealed decreased breath sounds bilaterally but no rales. His abdomen was obese, the liver edge was 4 cm below the costal margin and the spleen was not palpable.

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Both knees were enlarged, warm and showed limitation of motion. The rest of the examination was not remarkable.

His initial Factor VIII level was 1.5% of normal. Hemoglobin and hematocrit were normal; total white blood cell count was 4,800 and the differential count was: polymorphonuclears 85%, lymphocytes 6%, monocytes 5%, eosinophils 4%. Urinalysis was normal. Serum bilirubin and alkaline phosphatase were normal; lactic dehydrogenase was 245 mu/ml (normal ≤ 225), aspartate aminotransferase was 135 mu/ml (normal ≤ 40). Gamma globulin was 2.2 gm/dl (normal 0.6 to 1.6) and appeared polyclonal. Chest x-ray was interpreted as showing moderate diffuse interstitial fibrosis.

In preparation for surgery he was given Factor VIII concentrate which raised his level to 71%. The next day he was seen to have rigors and fever and planned surgery was deferred. His knees were more inflamed and painful. He was tachypneic at rest. Blood cultures taken prior to administration of intravenous antibiotics yielded no bacteria. Lymphopenia without total leukocytosis and a hectic febrile course (Fig. 1) continued despite administration of intravenous oxacillin and gentamicin. In belief his fever was due to new hemarthrosis, he was given indomethacin in daily doses of 75 mg. This resulted in prompt relief of symptoms and fever. The indomethacin was stopped after three days and fever immediately recurred. He now complained of dyspnea; arterial blood gases revealed a PC02 of 24 mm Hg (normal 40 ± 5), PO2 57 mm Hg (normal 80 ± 10), and oxygen saturation of 90% (normal 96 ± 1). Serial chest x-rays demonstrated progression of bilateral interstitial infiltrates. The patient was anergic to Mantoux and streptokinase/streptodornase skin tests. Radioactive gallium citrate scan showed no abnormal uptake. He was now treated symptomatically with prednisone in dosage of 30 mg per day. Again he promptly improved and was able to go home for Christmas holidays to continue prednisone in doses of 20 mg per day.

The patient was readmitted seven days later because of increasing dyspnea and recurrence of rigors. He had marked respiratory distress and a temperature of 38C. An abscess was present in the buttock at a site of prior intramuscular injection. Blood cultures were again free of bacteria. Chest x-rays revealed further progression of the bilateral pulmonary interstitial infiltrate. He had received a total of 550 mg of prednisone over three weeks when an open lung biopsy was done. On microscopic examination, lung tissue showed interstitial pneumonitis and pneumocystis organisms in great numbers. Intravenous treatment with trimethoprim and sulfamethoxazole was begun and temporary improvement in respiratory function resulted. However, massive gastrointestinal bleeding, hypotension and then renal failure ensued, leading to his death.

Findings at autopsy* revealed both lungs to have extensive chronic interstitial infiltrate. In some alveolar spaces there was foamy amorphous exudate which contained some *P. carinii* cysts. The liver had increased portal fibrosis with bridging pseudolobulation, portal tracts had mild lymphocytic infiltration. No active necrosis was evident. The spleen showed congestion and profound lymphopenia. The major pathological diagnoses were bilateral interstitial pneumonia due to *P. carinii*, micronodular portal cirrhosis of the liver, gastrointestinal hemorrhage due to superficial gastric lesions and acute tubular necrosis of the kidneys.

*performed by Dr. Robert V. Thomson

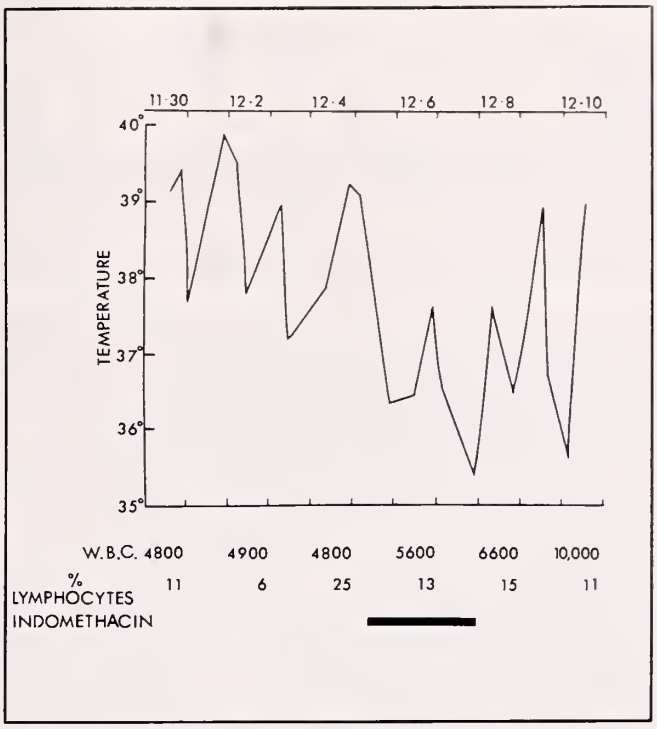


Fig. 1—Hospital course of patient prior to administration of prednisone. Note lymphopenia and lack of increase in total white blood cell count per μl. Percentage of lymphocytes includes both lymphocytes and monocytes.

Discussion ● The patient had been hospitalized electively for joint replacement. Except for hemophilia A and its well known direct and indirect complications, including joint damage and chronic liver disease,[5] he had been in general good health. There was no known homosexuality or drug abuse. Shortly after hospital entry fever, lymphopenia and interstitial pneumonia became evident prior to administration of corticosteroids. Lung tissue taken at biopsy revealed overwhelming *P. carinii* pneumonia. At postmortem examination there were no findings of lymphoproliferative or other malignant disease. Although no specific lymphocyte function studies were done, the sustained lymphopenia (Fig. 1) and anergy evident prior to corticosteroid treatment may be taken as evidence of suppression of normal T lymphocyte function.

Epidemiological studies indicate subclinical exposure to pneumocystis infection is widespread by age four[6,7] and *P. carinii* cysts may be found in lungs of individuals with no apparent disease.[8] However, the occurrence of pneumocystis pneumonia in persons with diseases treated with chemotherapy or irradiation is directly related to the extent and intensity of such therapies,[9] which greatly depress lymphocyte function.

We propose that this patient acquired cellular immunosuppression as a result of treatment with Factor VIII concentrate derived from a large pool of plasma obtained from a number of different donors. A small amount of highly infectious plasma could readily contaminate a large pool. We postulate that a transmissible agent causing immunosuppression

was present in the plasma of one or several donors and this agent contaminated one or more of the batches of Factor VIII concentrate received by the patient.

We further suggest that this agent has also been responsible for immunosuppression in homosexual men and parenteral drug abusers who may be paid donors of plasma from which Factor VIII is made. Thus, a blood transmissible agent could be a link between immunosuppression leading to pneumocystis pneumonia in homosexual men, drug abusers and our patient with hemophilia.

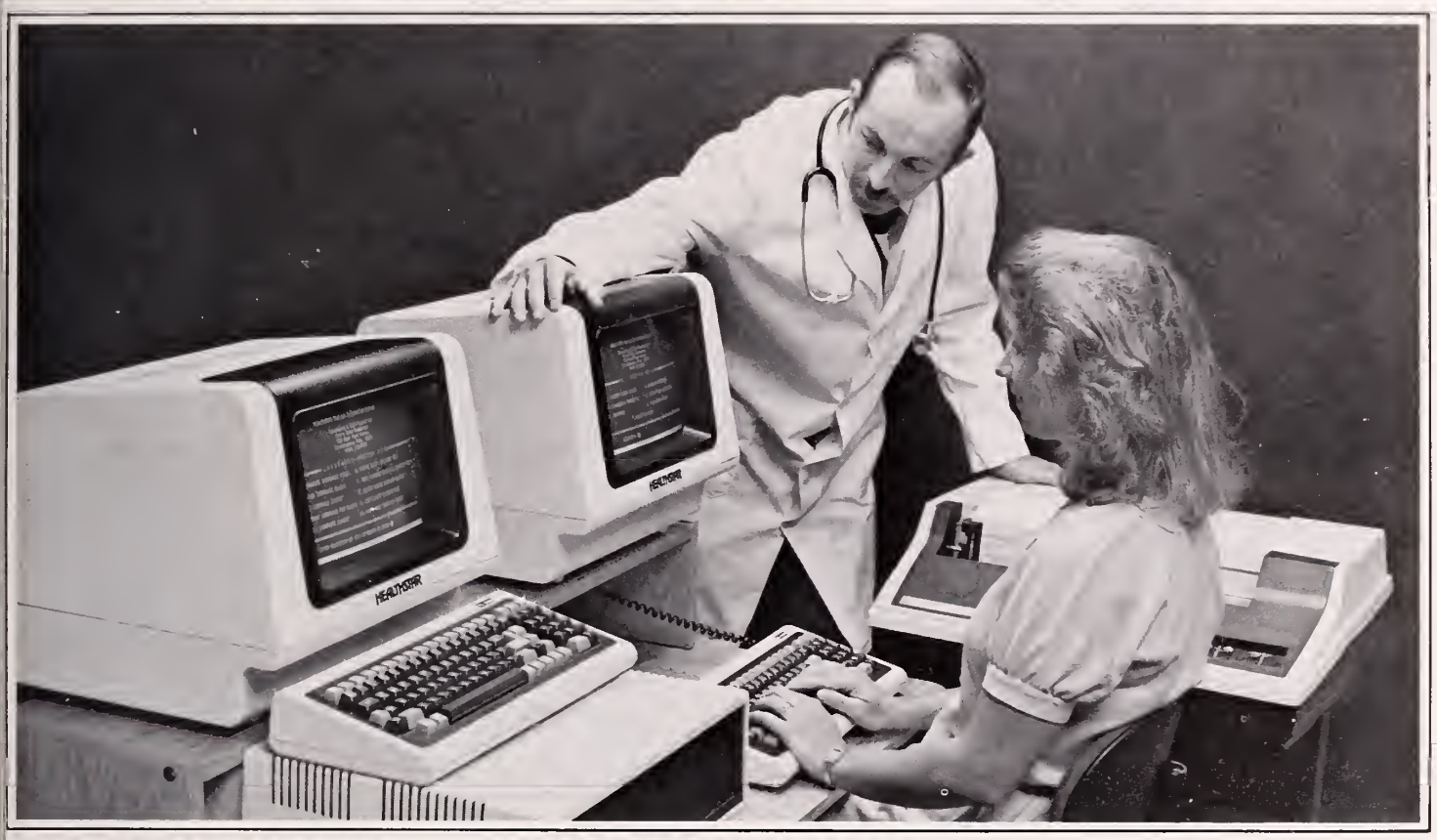
We notified the Centers for Disease Control of this patient in January, 1982 as there were no reports of similar individuals. Two additional men with hemophilia A and pneumocystis pneumonia have subsequently been briefly reported.[10] In these persons, laboratory evidence for cellular immune dysfunction included decrease in T-helper lymphocyte cells, relative increase in T-suppressor lymphocytes and a resultant inverted T-helper/T-suppressor ratio. Review of records of Factor VIII administration in all three individuals to determine manufacturing source and lot revealed that no two had received concentrate from the same lots.

References

1. Walzar, P.D.; Krogstad, D.J.; Rawson, P.G., and Schultz, M.G.: Pneumocystis carinii Pneumonia in United States, Ann. Intern. Med. 80:83-90, 1974.
2. Gottlieb, M.S.; Schroff, R.; Schanker, H.M., et al. Pneumocystis carinii Pneumonia and Mucosal Candidiasis in Previously Healthy Homosexual Men, N. Engl. J. Med. 305:1425-1431, 1981
3. Masur, H.; Michelis, M.A., and Greene, J.B., et al: Outbreak of Community-Acquired Pneumocystis carinii Pneumonia, N Engl. J. Med. 305:1431-1438, 1981.
4. Centers for Disease Control, Opportunistic Infections and Kaposi's Sarcoma Among Haitians in United States, Morbid. Mortal. Weekly Rep. 31:353-361, 1982.
5. Boyer, J.L. and Miller, D.J.: Chronic Hepatitis In: Schiff, L. and Schiff E.R. (eds.) Diseases of the Liver. 5th ed., Philadelphia: J.B. Lippincott, pp. 771-811, 1982.
6. Meuwissen, J.H.E.T.; Tauber, I., Leeuwenberg, A.D.E.M.; Beckers, P.J.A. and Sieben, M.: Parasitological and Serological Observations of Infection with Pneumocystis in Humans, J. Infec. Dis. 136:43-49, 1977.
7. Pifer, L.L.; Hughes, W.T.; Stagno, S., and Woods, D.: Pneumocystis carinii Infection: Evidence for High Prevalence in Normal and Immunosuppressed Children, Ped. 61:35-41, 1978.
8. Esterly, J.A.: Pneumocystis carinii in Lungs of Adults at Autopsy, Am. Rev. Resp. Dis. 97:935-937, 1968.
9. Hughes, W.T.; Feldman, S.; Aur, R.J.A.; Verzosa, M.J.; Husto, H.O., and Simone, J.V.: Intensity of Immunosuppressive Therapy and Incidence of Pneumocystis carinii Pneumonitis, Cancer 36:2004-2009, 1975.
10. Centers for Disease Control, Pneumocystis carnii Pneumonia among Persons with Hemophilia A, Morbid. Mortal. Weekly Rep. 31:365-367, 1982.

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SPECIAL ARTICLE

Outreach ophthalmology

Howard B. Goldman, M.D. and Jerome Aronowitz, M.D.

Surgical Eye Expeditions International (SEE) is an oganization which serves as the vehicle for interested Board certified ophthalmologists to perform short-term, recurrent surgical missions in third world areas, seeking out and operating upon the disadvantaged blind.

The Southeast Florida Chapter of SEE was chartered in January, 1981 and after appropriate negotiations was invited to work in Jamaica. To date, two expeditions totaling four operating days have resulted in 54 cataract operations being performed. The team includes physicians, operating room nurses, and technicians, who bring all supplies and instruments necessary for the planned surgery. The work is supported by private contributions and donations of materials and equipment. Team members receive no remuneration for their work.

Surgical Eye Expeditions International • (SEE) was begun in 1972 by a group of California ophthalmologists interested in providing surgical eye care for the treatment and prevent blindness in areas of the world where adequate care was not available. They organized frequent short-term expeditions to Mexico and, in time, developed and field-tested an innovative, portable and highly sophisticated ophthalmic surgical unit to rapidly screen disadvantaged patients for surgically correctable eye disease. These methods for preoperative screening of patients, performing eye operations and coordinating the delivery of care with local health personnel have resulted in over 1,760 sight-saving operations to date at no cost to the patient or to the limited resources of the local health care system.[1,2] The recently incorporated chapter of SEE, located in southeast Florida, was chartered by the national organization in January, 1981.

The Authors
HOWARD B. GOLDMAN, M.D.
JEROME ARONOWITZ, M.D.
Dr. Goldman practices Ophthalmology in Boca Raton, and Dr. Aronowitz practices in Margate.

Methods • The Florida Chapter investigated those areas in the Caribbean and Central and South America where blindness exists because adequate surgical eye care is not available. A fact finding trip was made to Jamaica to meet with the local ophthalmic community and the Minister of Health and to assess the need for SEE services.

There is a backlog of people who are bilaterally blind from cataracts; some have been on the waiting list for surgery approximately four years.

Jamaica, a country of 2.2 million people, was granted independence from Great Britain in 1962.[3] There are a number of qualified specialists in Jamaica but it is insufficient to cope with the current medical needs, particularly of underprivileged patients. There is a public health care system which charges no fee to patients in public clinics and hospitals. The public sector experiences a continual shortage of supplies and physicians. This shortage has meant the curtailment of most elective surgery. Consequently, there is a backlog of people who are bilaterally blind from cataracts; some have been on the waiting list for surgery approximately four years.

The Florida Chapter of SEE was formally invited to field a team to Jamaica in August, 1981. The first mission was to the Cornwall Regional Hospital in Montego Bay in October, 1981.

Air Jamaica donated fares for the six members of the team. Ground accommodations were sponsored by the Workers Bank of Jamaica through cooperation of the North St. Andrews Kiwanis of Kingston. All disposable supplies including knife blades, drapes, medications and sutures were donated by the medical manufacturers and two hospitals, Cypress Community Hospital, Pompano Beach and North Ridge General Hospital, Ft. Lauderdale. Major

ophthalmic equipment such as a Keeler-Amoils cryoprobe, Codman-Mentor bipolar cautery and a portable microscope were donated by their manufacturers. The surgical instruments were loaned by the Santa Barbara, California Chapter of SEE.

A typical SEE team includes three or four ophthalmologists and three or four operating room nurses or technicians. The team provides everything needed for performing intraocular surgery including gloves, gauze pads, sterile solutions and syringes to avoid placing any burden on the supplies of the host country. These operating room necessities are packaged on a per case basis by the team.

The participating physicians must be certified by the American Board of Ophthalmology. Direct services to the blind is central to the SEE philosophy. The restriction to Board certified physicians is important to acceptance of these missions by the host country as service rather than training or experimentation. All medical personnel are volunteers.

In Jamaica, a patient must wait one year after surgery for a refraction and an additional three months before spectacles can be obtained.

Cooperation with the local medical community is important for the long-term follow-up of patients. At Cornwall Regional Hospital the team worked with Dr. P. Maung, chief of the opthalmology section. Dr. Maung had admitted 30 patients from the surgery waiting list prior to arrival of the SEE team. A brief history, vision, slit-lamp, intraocular pressure and ophthalmoscopic examinations were performed by team physicians. The patients' charts were reviewed. In Jamaica, because of the presence and cooperation of local ophthalmologists, it was not necessary to screen large numbers of patients. SEE missions to more remote areas require screening of large numbers of people to find suitable cases.

Following the triage of patients, surgery was performed on 23 individuals over the course of two days. The team excluded patients who were either not bilaterally blind or in whom there were medical or other contraindications to surgery. This was in recognition of the limited supplies and time as well as in keeping with good medical practice.

Postoperative rounds were performed with Dr. Maung. Temporary cataract spectacles brought by the team were distributed on rounds to patients. In Jamaica, a patient must wait one year after surgery for a refraction and an additional three months before spectacles can be obtained. The temporary spectacles allow for useful vision very early in the postoperative period.

Most of the surgery was done on hypermature cataracts. For the most part, patients improved from "hand motion," or light-perception vision, to being able to see well enough to get around without being led, recognize faces, and fulfill most of their visual needs.

The second mission was made to the Kingston Public Hospital. The SEE team arrived at Kingston in February, 1982. Again, supplies were donated by manufacturers and local hospitals. Air Jamaica provided reduced air fares. The ground accommodations were paid by the Workers Bank through the North St. Andrews Kiwanis of Kingston.

In a significant departure from previous SEE missions, the team brought intraocular lens implants. This was at the specific invitation and written authorization of Dr. Kenneth Baugh, Minister of Health of Jamaica, and Dr. Mangu Chin, chief of the ophthalmology section at the Kingston Public Hospital. The decision to perform implants was based on the availability of skilled ophthalmologists to follow-up on the patients and the inadequacy of the system for refraction and dispensing of spectacles in Jamaica.

Dr. Chin had admitted 31 bilaterally blind individuals. These patients were examined by the team and all underwent surgery during the ensuing two day period. Fifteen implants were performed. Patients with diabetes or glaucoma were excluded from implant surgery.

All surgery was performed under local anesthesia with no intravenous sedation. On both missions two operating tables were placed in one theater with one circulating nurse serving both tables. At Cornwall Regional Hospital, a Topcon microscope was used at one table while the second surgeon used operating loupes. At Kingston Public Hospital, a portable Codman-Mentor microscope was employed and again loupes were used by the second surgeon. Usual sterile techniques were employed. All the necessary paper work was filed for implants performed.

As at Cornwall Regional Hospital, postoperative rounds were performed with local physicians. The response of patients, particularly those who had undergone lens implantation was remarkable. This rapid restoration from blindness to vision was extremely gratifying for both physicians and patients.

Discussion ● The World Health Organization estimates that there are between 20 and 40 million blind people. Most of these individuals live in third world countries. Jamaica has a functioning health care system but it is strained by severe limitations

in funds and physicians. The current waiting list of blind people at Kingston Public Hospital could be eliminated with ten SEE-type missions that can accommodate to the existing conditions at an extraordinarily low cost. Efficient use of volunteer personnel, donations of money, commercial transportation, and supplies provided by individuals and companies, bring the cost to approximately $150 to cure each blind person.

In this case, SEE obtained the welcome and invitation of the host country's political and medical community.

There are a number of organizations involved in work that is similar to SEE. The question of the most appropriate form of assistance to third world countries was raised by a conference recently described in the Journal of the American Medical Association.[4] Certainly expensive, technology-intensive and hospital-based systems such as that found in the industrialized nations rapidly become useless when the recipient country is unable to purchase disposable supplies, repair sensitive equipment, or to modify cultural attitudes that preclude use of such facilities by the local people.

In this case, SEE obtained the welcome and invitation of the host country's political and medical community. Surgery was performed in a hospital setting familiar to the patients and in cooperation with local physicians. A professional rapport was established and medical follow-up assured.

The unique concept of short-term, recurring expeditions to the area of need permitted the team to make its contribution without jeopardizing the members' private practices and positions in Florida. The team contributed its time with no remuneration, helped to raise funds from private contributions, and helped to obtain donations of materials and equipment from pharmaceutical and instrument companies.

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Note: Since publication of this article, one additional mission to Kingston has been completed during which 31 cataract operations, 20 with implants and 6 additional procedures on children were performed. Three additional missions are planned for 1983.

References

1. Brown, H.S. and Crowder, J.I.: SEE International: Clinical Aspects. Read before American College of Surgeons, Southern California Chapter Annual Meeting Newport Beach, California, January, 1982.
2. Crowder, J I and Brown, H.S.: SEE International: Delivery of Ophthalmic Services and Training of Para-medical Personnel. Read before International Society of Geographic Ophthalmologists, Edinburgh, Scotland, July, 1975.
3. Hurwitz, S.J. and E F.: Jamaica: A Historical Portrait, Praeger Publishers, N.Y. 1971.
4. Carpenter, M.: Restructuring Health Care in Third World, JAMA 247:1383, 1982.

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NOTES & NEWS

Dr. Rubin named president-elect of American Board of Ophthalmology



Dr. Rubin

Dr. Melvin Rubin, chairman of ophthalmology in the University of Florida's College of Medicine, has been named president-elect of the American Board of Ophthalmology (ABO), the medical profession's oldest certification board.

The appointment makes Rubin next in line for the organization's presidency, the opthalmology field's most prestigious rank which the UF medical professor will assume in 1984. He was elected by his peers on the 16-member board, composed of representatives of the three major opthalmological groups — the American Academy of Ophthalmology, the American Ophthalmological Society and the Section on Ophthalmology of the American Medical Association. Board members are elected to serve either one or two four-year terms.

Rubin, first appointed to ABO in 1977, is in the third year of his second term. The group is responsible for certifying the nation's ophthalmologists, more than 600 each year. Since 1917, the ABO has issued more than 13,000 certificates.

Rubin is the second UF College of Medicine faculty member to head a national medical certification board: Dr. William Enneking served as president of the American Board of Orthopedic Surgeons in 1979.

The eye specialist came to UF in 1963, becoming a full professor four years later. He was named department chairman in 1979 and has held national office in several professional organizations. In 1980-81, Rubin was president of the Association for Research in Vision and Ophthalmology, the nation's largest eye research organization.

He is known for his research and treatment of diseases of the retina, and has authored four textbooks, including one selected in 1979 by the American Medical Writers Association as best medical book of the year.

Dr. Coleman appointed by Senate

Dr. Francis C. Coleman of Tampa has been appointed by the United States Senate to the Board of Regents of the Uniformed Services University of the Health Sciences. Dr. Coleman was informed in December that his nomination by President Reagan had been confirmed. The Uniformed Services University of the Health Sciences includes teaching hospitals at Walter Reed Army Medical Center, National Naval Medical Center, Malcolm Grow Air Force Medical Center, and Wilford Hall Air Force Medical Center.

Dr. John (Jack) Q. Cleveland dies

Dr. John (Jack) Q. Cleveland, former President of the Florida Medical Association died Sunday, December 26, 1982. Services were held December 29th at the First United Methodist Church of Coral Gables.

Dr. Cleveland, 76, a native of Elberton, Georgia, and a graduate of Emory University School of Medicine, had practiced in Coral Gables since 1927. He was a founding member of Doctors Hospital and past chairman of the board. He had also served as president of the Dade County Medical Society and was among the first instructors at the University of Miami School of Medicine.

Dr. Cleveland is survived by a son, John Cleveland, Jr., a daughter, Lyn Culbertson, and three grandchildren. The family requests donations be given to the John T. MacDonald Foundation at Doctors Hospital, 5000 University Drive, Coral Gables 33157.

25 Florida hospitals await JCAH surveys

The Joint Commission on Accreditation of Hospitals (JCAH) will conduct accreditation surveys on 25 hospitals in Florida during the first quarter 1983. JCAH identified them as:

DeSota Memorial, Arcadia; Walker Memorial, Avon Park; Coral Gables, Coral Gables; Crestview Community, Crestview; West Volusia Memorial and First Memorial, both of Deland; North Ridge General, Ft. Lauderdale; Lee Memorial, Ft Myers; Palm Springs

General, Hialeah; Daytona Beach General, Holly Hill; Doctors Hospital, Coral Gables; and Cedars Medical Center and Baptist Hosptial, both of Miami.

St. Francis, Miami Beach; Everglades Memorial, Pahokee; Fawcett Memorial, Port Charlotte; Plantation General, Plantation; Pembroke Pines General, Pembroke Pines; Palms of Pasadena and St. Anthony's, both of St. Petersburg; Lake Seminole, Seminole; Hillsborough County, Tampa; St. Mary's and Good Samaritan, both of West Palm Beach, and Henry General, Clewiston.

DEAN'S MESSAGE

Cancer, aging, mental health and immunobiology in our research development

When I assumed the position of Dean of the College of Medicine, and Director of the University of South Florida Medical Center three years ago I entered my office with two major objectives in mind. One was my determination to complete the clinical development of the College of Medicine in the Tampa Campus of the University of South Florida simultaneously with our established and continuing programs in Tampa General Hospital. My second major commitment was to the accelerated development of our research capabilities far above the expected level of sophistication and productivity of a very young institution. In the August issue of *The Journal* I reported on the progress made in meeting our first objective; i.e., the status of planning for our academic health center. The subject of this report concerns our current ideas on how to realize the second major objective; i.e., developing our school into one of the major biomedical research centers of this nation in an era of austerity and shrinking national, state, and local resources.

In a 1968 article in the *British Journal of Psychiatry*, writing on the promotion of psychiatric research, Sir Geoffrey Vickers said: "Research workers are commonly regarded as geese who occasionally lay golden eggs. The three main ways of encouraging them to do so reflect different views of the extent to which this odd process can be either stimulated or directed. One way is to cosset any goose that actually has laid a golden egg, in the hope that it will lay some more. A second way is to specify the golden eggs required and offer rewards for them, hoping thus to move still unidentified geese to egg-laying. The third way is to go on increasing the goose farm in the hope that some statistical law will ensure that the number of golden eggs laid rises roughly in proportion to the number of birds capable of laying eggs at all."

These three main methods of encouraging research also touch upon some of the old philosophical dilemmas of biomedical investigation. Should knowledge be pursued for its own sake, by investigators shut away in ivory towers? Should all research be mission-oriented, directed firmly towards particular groups of patients and particular diseases?

These methods and models of promoting research in an academic setting are not mutually exclusive, however; there are obvious overlaps among them, and may be interdependent. For instance, in our school there are pockets of major investigative strength in every basic science as well as clinical departments as in every American medical school. These departmental islands of strength are complementary to and supportive of each other and they all contribute to an intellectual atmosphere appropriate for an academic environment. It is also self-evident that scientific determinism is irreconcilable with the freedom of thought in general and with academic freedom in particular. Such islands of strength, therefore, must be protected and encouraged to strive.

Nevertheless, for a young institution that is just about to begin its long march toward excellence in research in an economic climate that is clearly adverse to such a development, a centrally directed masterplan is clearly required for the delineation of major priorities that may be administratively supported.

The special needs of the population in the central-west portion of Florida, and the physical resources already available, or expected to develop on our campus, are necessarily the major determinants in our selection of a primary institutional research profile that can be realistically developed at this time. Thus, in view of the fact that our region represents the highest concentration of elderly in the entire world, two years ago our administration committed major resources for the establishment of the Suncoast Gerontology Center under the directorship of Dr. Eric Pfeiffer, a world-renowned authority on aging. Simultaneously, divisions of geriatric medicine and geriatric psychiatry have also been established in their respective parent departments, and by now are supported by large federal grants.

On January 24, 1983, ground will be broken for the construction of a comprehensive cancer and research center on our campus providing the vehicle for the beginning of a major research program in neoplasia. In the cancer field there is already important academic strength available in the departments of biochemistry, gynecology, urologic surgery, medicine, and pediatrics, to which considerable investigative preparedness has been recently added as

discussed below. A year ago, The Florida Mental Health Institute became a part of the University of South Florida, and planning for the construction of an acute care psychiatric hospital with appropriate provisions for fundamental research is under way.

One of the great achievements of the past 15 years has been the discovery of the pivotal role of immunoregulation in various aspects of cancer, the process of aging, and some neuropsychiatric manifestations. In fact, immunoregulation is emerging as possibly the most important single cohesive link among these various fields. On the faculty of the departments of medical microbiology, and pharmacology and therapeutics there are prominent investigators whose contributions in the field of microbial influences on the immune network and associated pharmacologic reactivities have been internationally recognized for some time. To this existing group important strength has been added in the past year. Dr. David T. Rowlands, Jr., with international prominence in developmental immunology and the immunopathology of cancer has been recruited from the University of Pennsylvania for the position of chairman of the Department of Pathology. Dr. William E. Stewart, one of the most significant scholars of the interferon system; Drs. John W. Hadden, the widely known immunopharmacologist in the immunotherapy of cancer; Dr. Alfredo Giner-Sorolla, the noted purine chemist, and Dr. Ronald G. Coffey, a recognized cellular immunologist, have all been recruited from the Memorial Sloan-Kettering Cancer Center, New York and appointed into professorial positions on our faculty. More similarly significant scientists in our targeted research areas are in the process of recruitment.

In the aggregate, these are the reasons why I have selected cancer, aging, mental health, and immunobiology as well as their interrelationships as our immediate major research priorities for the College of Medicine.

Andor Szentivanyi, M.D.
Dean of the College of Medicine
Director of the University of
South Florida Medical Center

WORTH REPEATING

Contingency fee unfair to doctors

JACKSONVILLE—Thank you for your editorial of Sept. 13, "$14,660 a Day Is Reasonable Pay?" You hit the problem squarely between the eyes and it is hoped the reaction to that exorbitant fee will help bring about a change in the contingency method for plaintiff attorney charges.

Usually when the contingency fee is attacked the cry goes up that the poor people can't get an attorney without it. But just as there is Medicaid there is Legal Aid.

Many years ago I testified for the Florida Medical Association before President Kennedy's Malpractice Commission in New Orleans, I presented the hypothetical case that I was busy as a surgeon operating on a patient for internal bleeding, desperately trying to save his life.

The anesthesiologist was busy getting the patient out of shock and attempting to keep him out, administering blood, fluids, drugs and electrolytes as indicated, as well as giving necessary anesthesia.

The operating room personnel was busy helping with our tasks as well as trying to keep count of sponges, instruments, and needles. We succeeded in stopping the bleeding and saving the life. The patient recovered.

Sometime later an abdominal x-ray was made and revealed that somehow a forceps that had been used to clamp a blood vessel had been left in the abdomen. As a stainless steel object it was inert so it may or may not have caused damage. Whether it did or did not, his life suddenly became monetarily very valuable. Whereas I saved it for $500 to $1,000, I am sued for $500,000 to $1,000,000.

This sum was based on real and expected expenses, possible loss of income, and "pain and suffering." Had he died it would have been based on loss of income for his expected life span. The attorney's contingency fee is based on a percentage, usually 40 to 50 percent, of any award from such a suit and nothing if it is lost.

I maintain if this is correct practice then we doctors are charging wrong. We should tell patients before major surgery and illness, that if they die we won't charge anything. If they live, we will charge a percentage of their income, for the rest of their lives. That sounds ridiculous but that's how the contingency fee works. It is not equitable for a life to be cheap when saved but quite valuable if lost or harmed with a prospect of monetary gain.

Samuel M. Day, M.D.
Past President (1964)
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Reprinted from *The Tampa Tribune*, November 1, 1982.



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See next page for brief summary of prescribing information.

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- Measured against a propoxyphene-acetaminophen combination for pain relief after 3rd molar extractions, ibuprofen proved equally effective and caused fewer side effects. Ibuprofen was associated with faster recovery, evidenced by more rapid reduction of trismus and return to normal function.[3]
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References:

1. Hart FD, Huskisson EC, Ansell BM in Hart FD (editor): Drug Treatment of the Rheumatic Diseases, 2nd Ed, Adis Press, Balgowlah, Australia, 1982, p. 30.
2. Rondeau PL, Yeung E, Nelson P: Canad Dent Assoc J 46:433-439, 1980.
3. Selwyn P and Giles AD: Br Jrl of Clin Practice, Supplement 6, Safe and effective analgesia following dental surgery: A comparison of brufen and distalgesic. Pg 87-90. 1980.
4. Taina E: Curr Med Res Opinion, 7:423-428, 1981.



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And Rufen® Measures Up Best

RUFEN® (ibuprofen) Tablets

INDICATIONS AND USAGE: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in the long-term management of these diseases. Safety and effectiveness have not been established for Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain. Treatment of primary dysmenorrhea.

CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angio-edema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally, however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: *Coumarin-type anticoagulants*. The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS: Incidence greater than 1%. Gastrointestinal: The most frequent adverse reaction is gastrointestinal (4 to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). Central Nervous System: dizziness*, headache, nervousness. Dermatologic: rash* (including maculopapular type), pruritus. Special Senses: tinnitus. Metabolic: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS). *Incidence 3% to 9%.

Incidence less than 1 in 100. Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. Central Nervous System: depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma. Dermatologic: vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome and alopecia. *Special Senses:* hearing loss, amblyopia (blurred and/or diminished vision, scotomata and/or changes in color vision) [see PRECAUTIONS]. Hematologic: neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs' positive), thrombocytopenia with or without purpura eosinophilia, decreases in hemoglobin and hematocrit. Cardiovascular: congestive heart failure in patients with marginal cardiac function, elevated blood pressure. Allergic: syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis, bronchospasms (see CONTRAINDICATIONS). Renal: acute renal failure in patients with preexisting significantly impaired renal function, decreased creatinine clearance, polyuria, azotemia, cystitis, hematuria. Miscellaneous: dry eyes and mouth, gingival ulcers, rhinitis.

Causal relationship unknown. Gastrointestinal: pancreatitis. Central Nervous System: paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri. Dermatologic: toxic epidermal necrolysis, photoallergic skin reactions. Special Senses: conjunctivitis, diplopia, optic neuritis. Hematologic: bleeding episodes. Allergic: serum sickness, lupus erythematosus syndrome, Henoch-Schonlein vasculitis. Endocrine: gynecomastia, hypoglycemia. Cardiovascular: arrhythmias (sinus tachycardia, bradycardia, and palpitations). Renal: renal papillary necrosis.

OVERDOSAGE: Acute overdosage, the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit.

DOSAGE AND ADMINISTRATION: Rheumatoid arthritis and osteoarthritis, including flareups of chronic disease: Suggested dosage 400 mg t.i.d. or q.i.d.

Dysmenorrhea: 400 mg every 4 hours as necessary

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for the relief of pain. *Do not exceed 2,400 mg per day*

CAUTION: Federal law prohibits dispensing without prescription.








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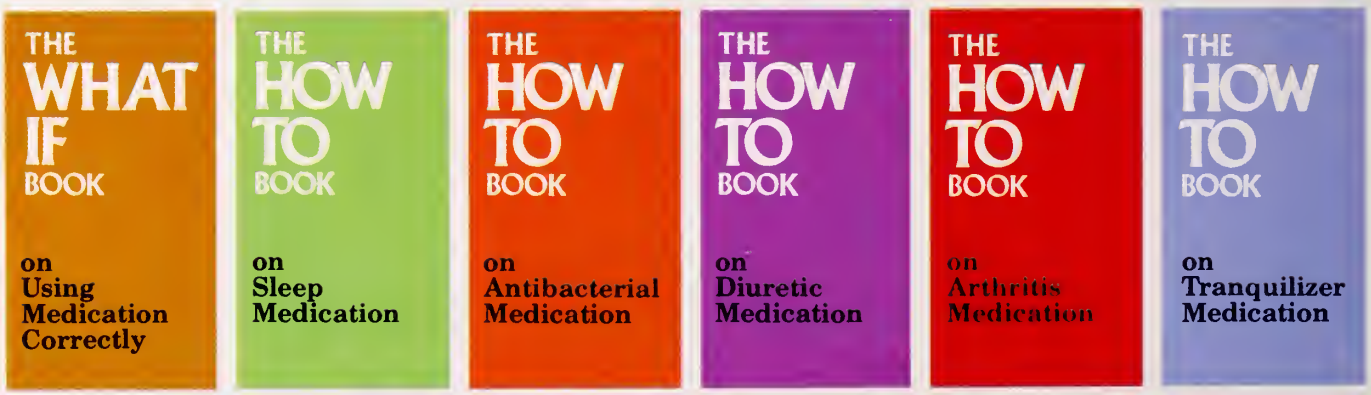
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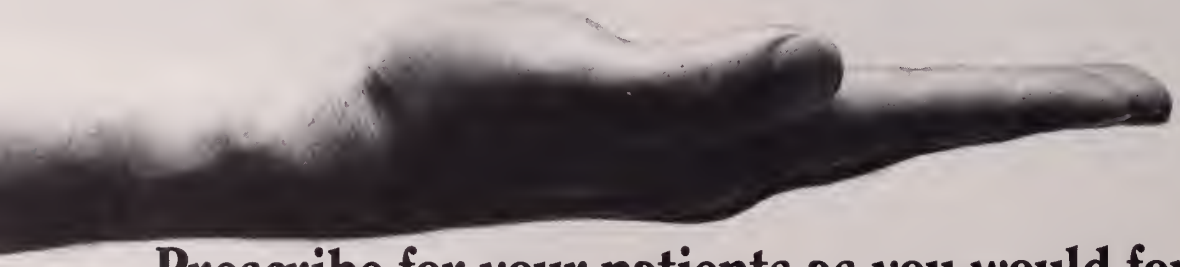
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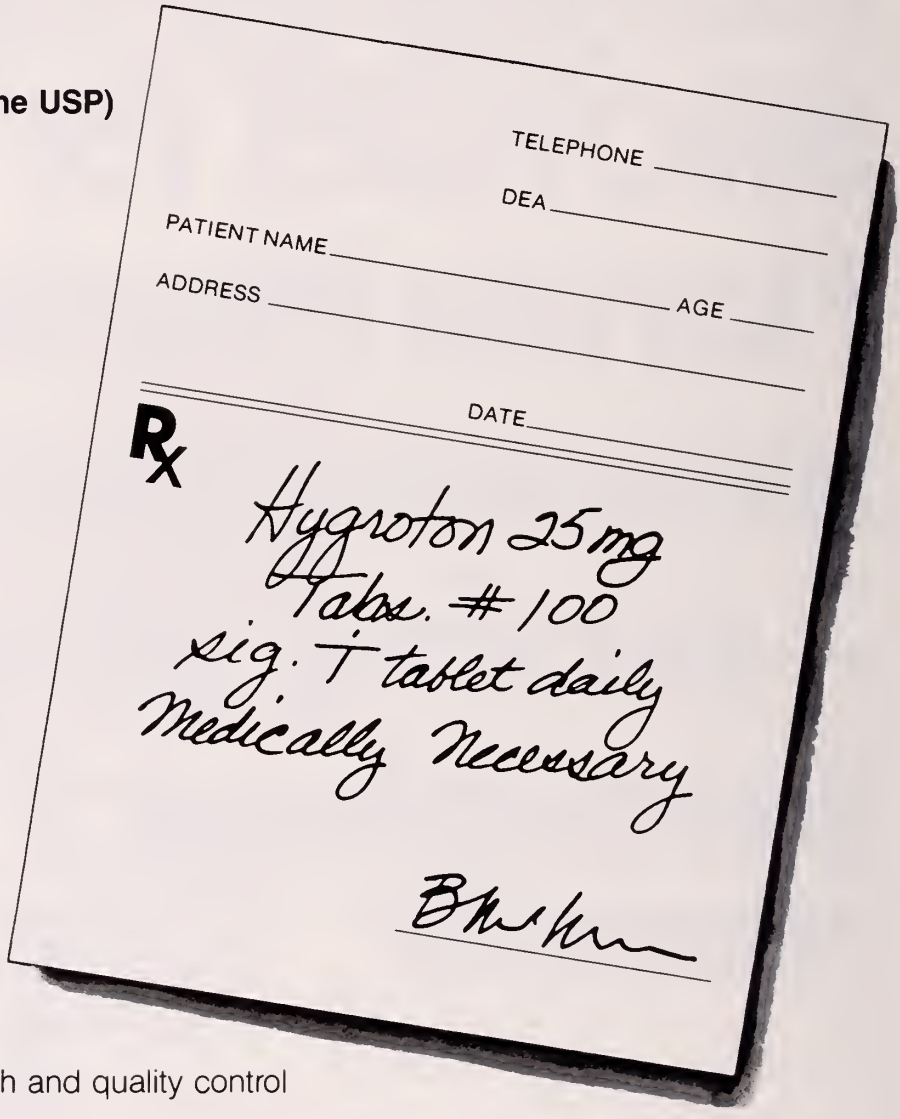
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BRIEF SUMMARY

Indications: Hypertension, adjunctive therapy in edema.

Contraindications: Anuria, hypersensitivity to chlorthalidone or other sulfonamide-derived drugs.

Warnings: Should be used with caution in severe renal disease, impaired hepatic function or progressive liver disease. May add to or potentiate the action of other antihypertensive drugs. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma. There is a possibility of exacerbation or activation of systemic lupus erythematosus with thiazides, which are related to chlorthalidone. This has not been reported with chlorthalidone. Thiazides cross the placental barrier and appear in cord blood. Use in pregnant women requires that the anticipated benefits of the drug be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. In nursing mothers, thiazides cross the placental barrier and appear in breast milk. If use of the drug is essential, the patient should stop nursing.

Precautions: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals. All patients receiving chlorthalidone should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Hypokalemia may develop with chlorthalidone as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH. Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity. Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather. Hyperuricemia may occur or gout be precipitated in certain patients. Insulin requirements in diabetic patients may be increased, decreased, or unchanged and latent diabetes mellitus may become manifest. Chlorthalidone and related drugs may increase the responsiveness to tubocurarine. The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient. Chlorthalidone and related drugs may decrease arterial responsiveness to norepinephrine. If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy. Chlorthalidone and related drugs may decrease serum PBI levels without signs of thyroid disturbance.

Adverse Reactions: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis; dizziness, vertigo, paresthesias, headache, xanthopsia; leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia; purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis) (cutaneous vasculitis), Lyell's syndrome (toxic epidermal necrolysis). Orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates or narcotics. Other adverse reactions include hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness, impotence. Whenever adverse reactions are moderate or severe, chlorthalidone dosage should be reduced or therapy withdrawn.

Usual Dose: One tablet daily

How Supplied: Tablets—100 mg. (white, scored), 50 mg. (aqua) in bottles of 100, 1000 and 5000; 25 mg. (peach) in bottles of 100 and 1000; unit-dose blister packs, boxes of 100 (10 x 10 strips).

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As an organization accredited for continuing medical education, the Medical Education Committee of the Florida Medical Foundation designates that this continuing medical education activity meets the criteria for 10 credit hours in Category I of the Physician's Recognition Award of the American Medical Association. This program meets the Florida Medical Association continuing medical education requirement for 10 hours of Florida Medical Association Mandatory credit.

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BOOK REVIEWS

Book Review Editor — **F. Norman Vickers, M.D.**

The discovery of insulin

By Michael Bliss, 304 Pages, Price $20, The University of Chicago Press, Chicago, 1982.

The traditional account of the discovery of insulin is a romantic story of an impecunious Canadian surgeon, Fred Banting, and a fourth year student of physiology, Charley Best, working day and night through a hot summer in a dingy, poorly equipped laboratory at the University of Toronto. Having made their great discovery they then had to do battle for their rightful honors with the imperious professor of physiology who had grudgingly provided the labortory while he was on holiday in Scotland. This romantic story made good newspaper copy and indeed, was fostered by Banting who developed a paraniod hatred for the professor.

However, that is not exactly the way it was according to Michael Bliss, an eminent Canadian historian. Using hither to unavailable laboratory notebooks, correspondence, published papers and many interviews with survivors of that time, Bliss has compiled an almost day to day account of the discovery of insulin and its consequences on the lives of the discoverers as well as several diabetics on whom it was first tried.

The research is exhaustive and the narrative engagingly written. Bliss has incorporated much human interest material that gives us a keen insight into the personalities of the principals: Fredrick G. Banting, Charles H. Best, J.B. Collip and J.J.R. Macleod.

Only rarely did this reviewer find fault. An instance of this appears on page 189 when the author implies that pre-Listerian surgery was "a way of taking lives." True, post-Listerian surgery was less often fatal but the surgeons before Lister also saved lives.

This classsic volume is for the physician or layman who wants to know the true story of the discovery of insulin and who enjoys good writing in the literary as well as the historical sense. It is destined to occupy an honored position as resource material in every library of the history of medicine.

William M. Straight, M.D.

● Dr. Straight is in the private practice of internal medicine in Miami; he is Historical Editor of *The Journal of the Florida Medical Association, Inc.*

Anatomy of an epidemic

By Gordon Thomas and Max Morgan-Whitts, 347 Pages, Price $16.95, Doubleday & Company, Inc., Garden City, NY, 1982.

This is a story of the Legionnaires' disease as it struck in Philadelphia and affected the lives of patients, hotel employees and public health physicians who dealt with the outbreak. The book is not technical in nature. It is hard to separate fiction from fact as the authors attempt to mix biographical sketches of the participants, including CDC characters, with the true events that surrounded the early days of our encounter with Legionnaires' disease.

Conclusions made about the organism by the authors have no credibility, i.e., "the bacterium's existence today signifies an eleventh-hour warning that there must be a change in the course of civilization.." (page 346). The drama here is also shallow. The text would be of little interest to physicians and I cannot even recommend to laymen.

Norman D. Bernstein, M.D.

● Dr. Bernstein practices internal medicine and infectious diseases in Pensacola.

AMA-ERF

(American Medical Association Education and Research Foundation)

The AMA-ERF is an AMA Foundation which operates on the national level to provide scholarships for medical education and to help provide funds for medical schools. Helping to provide these funds is one of the services asked of the Auxiliary by the AMA. With current state and federal budget reductions, the need for AMA-ERF assistance to medical schools is crucial.

Last year Florida Auxilians raised over $83,000 for AMA-ERF. To date, the Florida Auxiliary has collected over $63,000. The majority of these contributions are the result of the county holiday sharing cards. We are confident that our 1982-83 goal of $90,000 will be surpasssed.

Enthusiasm has been running high all over our sunshine state for the fund-raising activities which support this project. Over $3,500 profit has been made from the sale of the medical motif T-Shirts, the lovely nautilus tote bags and the aprons. Over $325 profit was made at a mini-raffle at the Fall Board meeting. The FMA-A Board participated in a holiday sharing card and earned a profit of $1,060. Greeting card sales ran high this year with profits—thus far—of approximately $3,000.

Each year at the annual meeting awards are given to counties based on county membership and the amount of contributions. If you, as a physician, would care to make a tax-deductible donation to AMA-ERF please contact your local ERF chairman and make your donation through the local auxiliary in order for your county to receive credit.

Jodie Jarrell (Mrs. Walter)
Jacksonville

International health

International Health is involved with an exciting project to eliminate the suffering of children not only in the United States but around the world.

Interplast South is an all volunteer, non profit organization which provides reconstructive plastic surgery for the children of underdeveloped nations. This Florida based organization is an outgrowth of Interplast, Inc. of the San Francisco Bay Area, where, over the past ten years, more than 3,000 children have been freed from their deformities through the efforts of the volunteers who cared enough to become "Involved in Mankind."

Frequent trips are made to Mexico, Honduras, Western Samoa, Equador, Haiti, and Africa by teams of dedicated Plastic Surgeons, Family Physicians, Pediatricians, Anesthesiologists, and nurses. As many as 80 patients are operated on on any given trip with hundreds of others being seen in the clinics.

In the past three years, 21 children have been brought to the South Florida area for reconstructive surgery. Children with cleft palate and lip deformities as well as those with disfiguring burn scars have returned home to their loved ones with the renewed potential to lead happy and productive lives.

This year the Florida Medical Association Auxiliary had a very successful Silent Auction at the Fall Conference; individual fund raisers at the county level, and the proceeds from this years cookbook, *Rx for Fine Dining*, to go to International Health. Plans are being made to increase the number of children that can be treated here in Florida.

Nancy Smith (Mrs. Laurin)
Orange Park

The Florida Medical Association Auxiliary acknowledges, and is deeply grateful to *The Journal of the Florida Medical Association* for publicizing the Auxiliary Cookbooks (proceeds to Interplast South) and T-Shirts (proceeds to AMA-ERF).

Gloria Nunn
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*6 egg whites**
½ tsp cream of tartar
¾ cup sugar
1 9" graham cracker pie shell, baked

In a small mixing bowl beat egg yolks until lemon-colored Blend in condensed milk Add lime juice; mix well In a large mixing bowl beat egg whites and cream of tartar until foamy Continue beating, adding sugar 1 tablespoon at a time until egg whites peak Fold 6 tablespoons of meringue into the filling mixture Pour into pie shell Top with meringue and bake in a slow 330°F oven for about 30 minutes or until golden brown Best served chilled May be frozen and kept for a couple of days before serving

*You can make the meringue with only 4 egg whites from the eggs you've used

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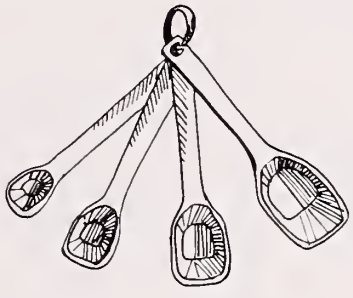
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15th Teaching Conference in Clinical Cardiology, Mar. 2-5, The Sheraton Bal Harbor Hotel, Bal Harbor. For information: Michael Gordon, M.D., University of Miami School of Medicine, Medical Training & Stimulation Lab., P.O. Box 016960, Miami 33101, (305) 547-6491.

Breast Disease Update, Mar. 2-6, Dutch Inn, Lake Buena Vista. For information: Lourdes S. Fuentes, Mount Sinai Medical Center, 4300 Alton Road, Miami 33140, (305) 674-2424.

Intensive Care for Neurological Trauma and Disease 1983, March 2-6, Americana Dutch Resort Hotel, Lake Buena Vista. For information: Division of CME D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. (305) 547-6716.

X-ray Interpretation for the Primary Care and Emergency Physican, March 3-6, Bahia Mar Hotel and Yachting Club, Fort Lauderdale. For info.: Ms. Llera, E.M.S.A., 8200 W. Sunrise Blvd., Plantation 33322, (305) 472-6922.

Internal Medicine Update '83, Mar. 7-12, Americana Dutch Resort Hotel, Lake Buena Vista. For information: Barry E. Sieger, M.D., 1414 South Kuhl Avenue, Orlando 32806, (305) 841-5144.

Hematology-Oncology Update, Mar. 8-11, Holiday Inn Surfside, Clearwater. For information: Robert Miller, M.D., 701 6th St. S., St. Petersburg 33701, (813) 823-1234, Ext. 2022.

1st Annual Gulfcoast Hematology/Oncology Conference Mar. 9-11, Holiday Inn, Surfside, Clearwater. For information: Robert Miller, M.D., (813) 823-1234, Ext. 2022.

Problems in Rheumatology, Mar. 10-13, Don CeSar Beach Resort Hotel, St. Petersburg. For information: Bernard Germain, M.D., Univ. of South Florida, Box 19, 12901 North 30th Street, Tampa 33612, (813) 974-2681.

E C G Interpretation of Arrhythmia Management, Mar. 11-13, Sheraton Royal Biscayne, Key Biscayne. For information: Stephen E. Mattingly, 64 Inverness Dr., E., Englewood, Colo. 80112. (800) 525-8651.

Fifth Annual Winter Seminar of the Miami Ophthalmological Society, Mar. 12-19, Sun Valley Lodge, Sun Valley, Idaho. For information: David J. Singer, M.D., F.A.C.S., 1160 Kane Concourse, Miami Bch. 33154, (305) 861-4946.

Advances in Resuscitation, March 14, St. Mary's Hospital, West Palm Beach. For info.: Dr. Gerald J. O'Connor, 901 45th St., West Palm Beach 33407, (305) 659-1633.

Current Clinical Concepts in Otolaryngology - 1983, March 15-17, Eden Roc Hotel, Miami Beach. For information: Anthony J. Maniglia, M.D., University of Miami School of Medicine, Post Office Box 016960, Miami, (305) 547-6716.

Cancer of Prostate Gland, March 17, Fort Cooper Station, Inverness. For information: Dale L. Osterling, M.D., 316 S. Line Avenue, Inverness 32650, (904) 726-5661.

14th Annual Topics in Internal Medicine, Mar. 17-18, Gainesville Hilton, Gainesville. For information: Ms. Grace Wagner, University of Florida CME, JHMHC, (904) 392-3143 or 392-3183.

Colposcopy and Laser in Gynecologic Practice - Update 1983, Mar. 17-19, Holiday Inn Surfside, Clearwater Bch. For information: Department of OB/GYN, Medical Center, Box 18, University of South Florida, Tampa 33612, (813) 974-2088.

Pan-American Symposium on Diseases of the Nose and Paranasal Sinuses, March 17-19, Eden Roc Hotel, Miami Beach. For information: A.J. Maniglia, M.D., University of Miami School of Medicine, P.O. Box 016960, Miami, (305) 547-6716.

Human Sexuality and Medical Practice, March 18-19, Daytona Hilton, Daytona. For information: Richard Dodd, M.D., Post Office Box 1990, Daytona Beach 32015, (904) 248-1584.

1983 Update in Obstetrics and Gynecology, Mar. 21-23, Orlando Marriott, Orlando. For information: Frank Riggall, M.D., Dept. of Ob/Gyn, Box J-294, Gainesville 32601.

5th Annual Family Practice Review, Mar. 21-25, Holiday Inn Surfside, Clearwater Beach. For information: C.E. Aucremann, M.D., 701 Sixth Street South, St. Petersburg 33701. (813) 823-1234.

Recent Advances in Nuclear Medicine and Other Imaging Modalities, Mar. 23-26, Eden Roc Hotel, Miami. For information: Division of Continuing Medical Education D23-3, Univ. of Miami School of Medicine, P.O. Box 016960, Miami.

Clinical Postgraduate Seminars in Gastroenterology - "Gastrointestinal Cancer", March 24, Medical Center Auditorium, Tampa. For information: Charles Aucremann, M.D., 701 6th Street South, St. Petersburg, 33701, (813) 823-1234.

Recent Advances in Nuclear Medicine Instrumentation, March 24-26, Miami. For info.: University of Miami School of Medicine, Post Office Box 016960, Miami 33101, (305) 547-6716.

Interesting Topics in Orthopedics: 1983, Mar. 24-26, PGA Sheraton Resort, Palm Beach Gardens. For informatio: Michael Zeide, M.D., 7820 Edgewater Dr., West Palm Beach 33406. (305) 967-8866 or 832-5167.

Infectious Diseases & Antibiotic Therapy '83, March 24-26, American Dutch Resort Hotel, Lake Buena Vista. For info.: Barry E. Sieger, M.D., 1414 South Kuhl Avenue, Orlando 32806, (305) 841-5144.

Current Trends in Medicine: A Look to the Future, Mar. 25-26, Oceanfront Holiday Inn, Melbourne. For info.: N. LaVista, 1400 Apollo Blvd., Melbourne 32901, (305) 724-0461.

Diagnostic Techniques in Pulmonary Medicine, Part I, Mar. 26-27, University of South Florida, Tampa. For information: David A. Solomon, M.D., 13000 N. 30th St., Tampa 33612, (813) 971-4500.

17th Family Practice Review, Mar. 28-Apr. 1, Sheraton World Conference Center, Orlando. For information: Lamar Crevasse, M.D., (904) 392-3143.

APRIL

Advanced Cardiac Life Support, Apr. 8-10, Pasco-Hernando Community College, New Port Richey. For information: James M. Marlowe, M.D., Post Office Box 1058, New Port Richey 33552, (813) 842-9574.

Family Practice Weekend - University of South Florida, April 8-10, Tampa Hyatt Regency Hotel, Tampa. For information: John E. Perchalski, M.D., 10320 56th St., Temple Terrace 33617, (813) 988-7345.

The Diagnosis and Management of Tachyarrhythmias, April 15 & 16, Pensacola Country Club, Pensacola. For information: W. Daniel Doty, M.D., (904) 434-1093.

13th Annual Radiation Therapy Clinical Research Seminar, April 28-30, University of Florida Health Center, Gainesville. For information: James T. Parsons, M.D., Box J-385, JHMHC, Univ. of Florida, Gainesville 32610, (904) 392-3161.

Problems in Clinical Anesthesia - The Pediatric Patient and the Cardiac Patient, Apr. Howard Johnsons, Pensacola. For information: Warren Sears, M.D., 1717 N. "E" Street, Suite 205, Pensacola 32501, (904) 434-4718.

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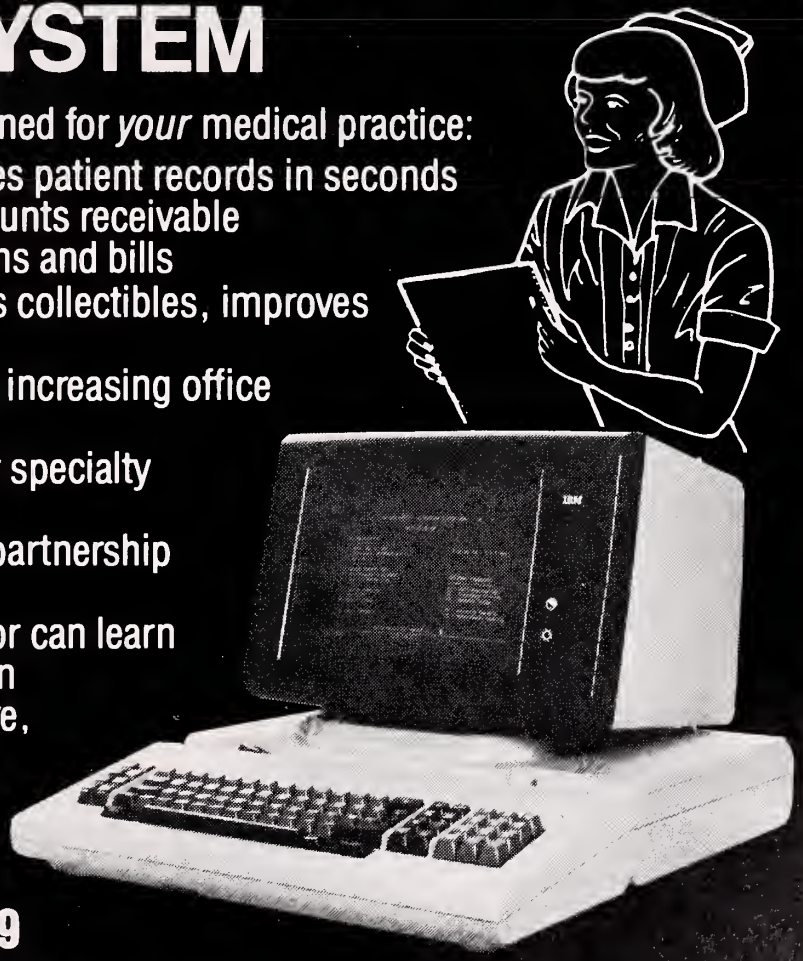
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FOR SALE — LAKE PARK, FLORIDA, medical building, 2016 sq. ft. Four year old concrete block, central air and heat. 12,500 sq. ft. landscaped corner lot, black top parking, main street. Reply: C-1117, P.O. Box 2411, Jacksonville, Florida 32203.

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Meetings

MARCH 19-20, 1983 — Advanced Cardiac Life Support Instructors Course. Provider Name: Emergency Medical Continuing Education Seminars Provider #:27MO509. 16 (sixteen) contact hours applied through the AMA, Category I of the Physicians Recognition Award. For further information call: EMCES Office (904) 396-5682.

April 14-15, 1983: Advanced Cardiac Life Support Provider Course. Provider Name: Emergency Medicine Continuing Education Seminars. Provider #: 27MO509. 16 (sixteen) contact hours applied through the AMA Category I of the Physicians Recognition Award. For further information call: EMCES Office (904) 396-5682.

JUNE 27-30, 1983: Emergency Department and Emergency Group Management Seminar: Jay W. Edelberg, M.D., Course Director. Location: Marriott Hotel, Hilton Head, South Carolina. As an organization accredited for continuing medical education, the Jacksonville Health Education Programs, Inc., designates this continuing medical education activity as meeting the criteria for 24 credit hours in Cat. 1 of the Physician's Recognition Award of the American Medical Association. For further information, please call: (904) 396-5682, EMCES office in Jacksonville.

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Heart Healthy Recipe

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1 20-ounce can peaches
1 20-ounce can bing cherries
1 20-ounce can pineapple chunks
2 11-ounce cans mandarin oranges
⅔ cup light brown sugar
2 teaspoons curry powder
juice of 1 lemon
¼ cup margarine

Drain fruits well in a colander until all juice has run off, 1 to 2 hours.

Prepare a shallow casserole (8 x 12 inches or similar size) by greasing it with margarine. Add fruit, cover with a mixture of brown sugar and curry powder, sprinkle with the lemon juice and dot with margarine.

Cover and bake 1 hour in oven at 300°F.

Yield: 12 servings, about 2 quarts
Approx. cal/serv.: ½ cup = 115

Heart Healthy Recipes are from the Third Edition of the American Heart Association Cookbook. Copyright © 1973, 1975, 1979 by the American Heart Association, Inc.

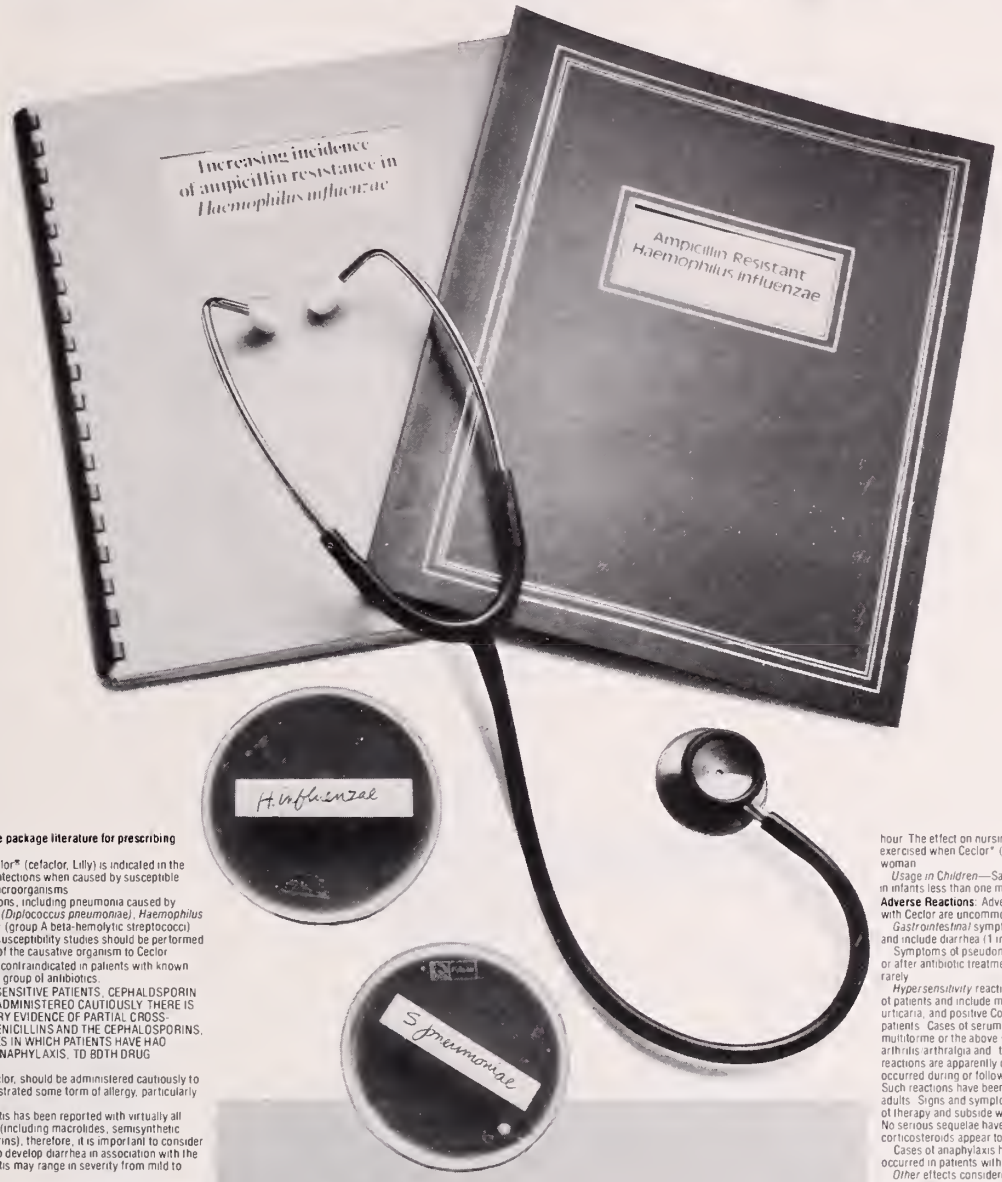
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Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

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Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions*—If an allergic reaction to Ceclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers—Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor* (cefaclor, Lilly) is administered to a nursing woman.

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations of SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

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* Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.*

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

References

1. Antimicrob. Agents Chemother., *8*: 91, 1975
2. Antimicrob. Agents Chemother., *11*: 470, 1977
3. Antimicrob. Agents Chemother., *13*: 584, 1978
4. Antimicrob. Agents Chemother., *12*: 490, 1977
5. Current Chemotherapy (edited by W. Siegenthaler and R. Luthy), II 880. Washington, D.C.: American Society for Microbiology, 1978
6. Antimicrob. Agents Chemother., *13*: 861, 1978
7. Data on file, Eli Lilly and Company
8. Principles and Practice of Infectious Diseases (edited by G. L. Mandell, R. G. Douglas, Jr., and J. E. Bennett), p. 487. New York: John Wiley & Sons, 1979

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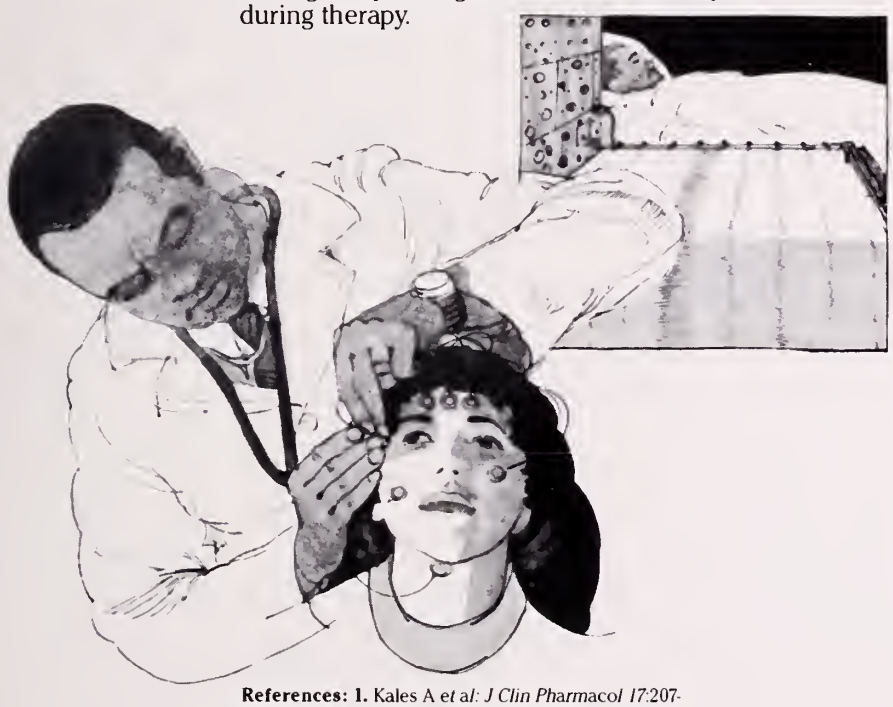
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References: 1. Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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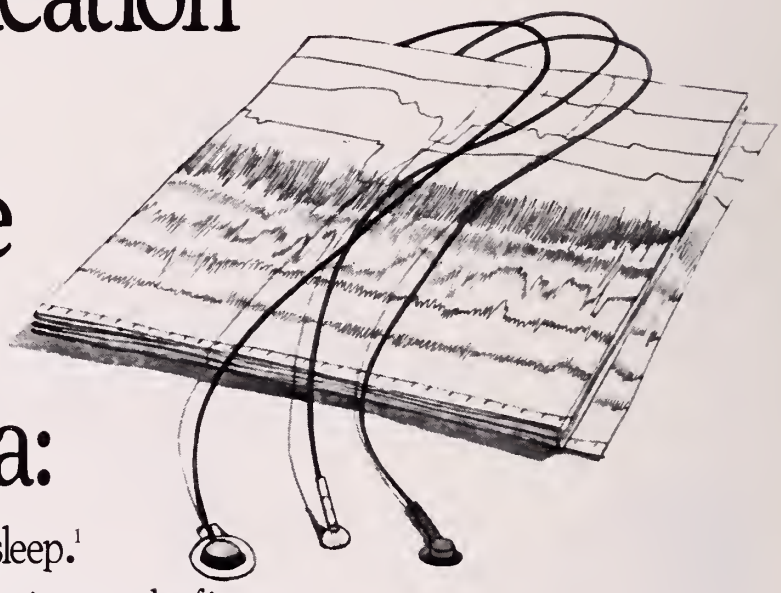
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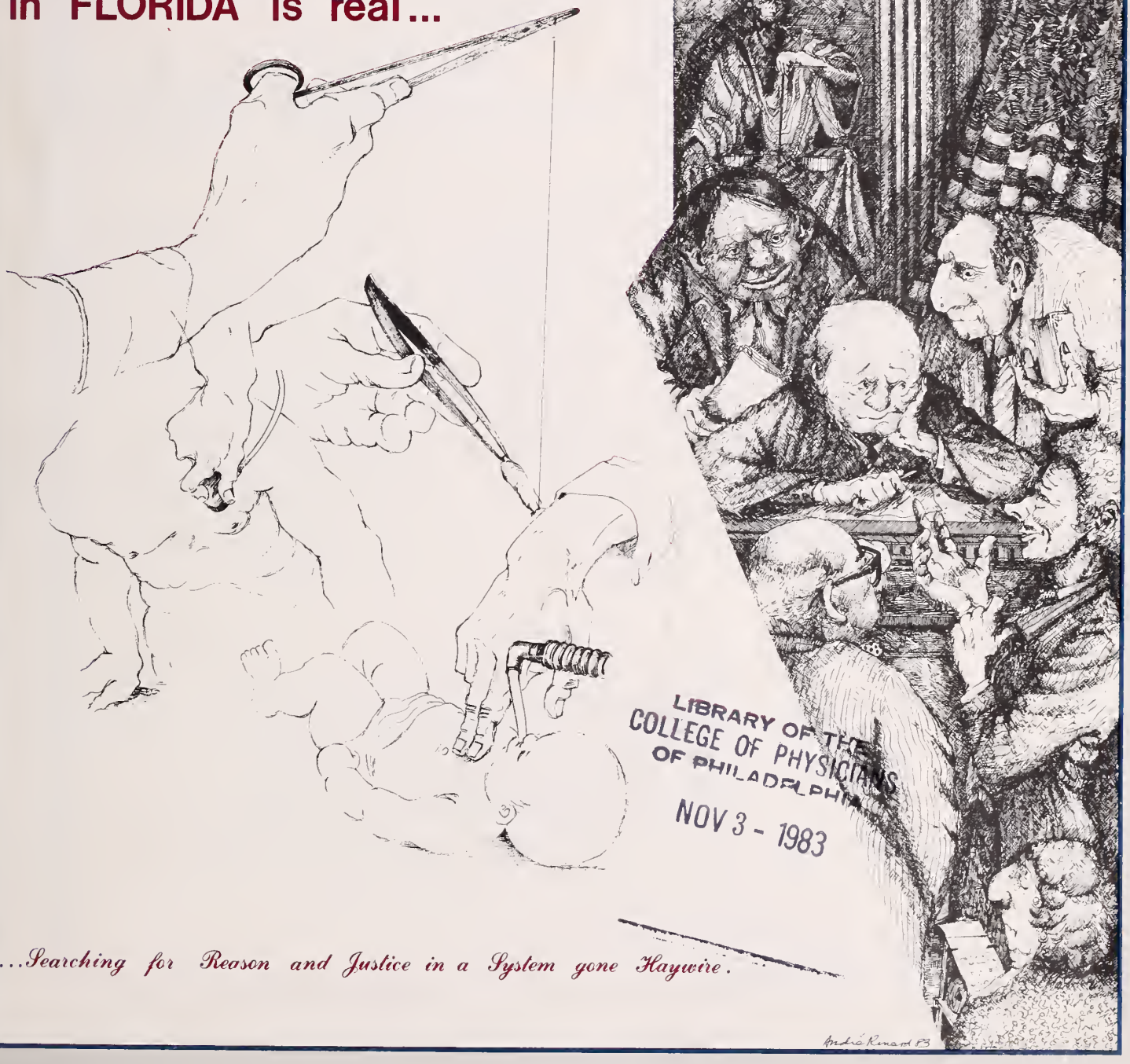
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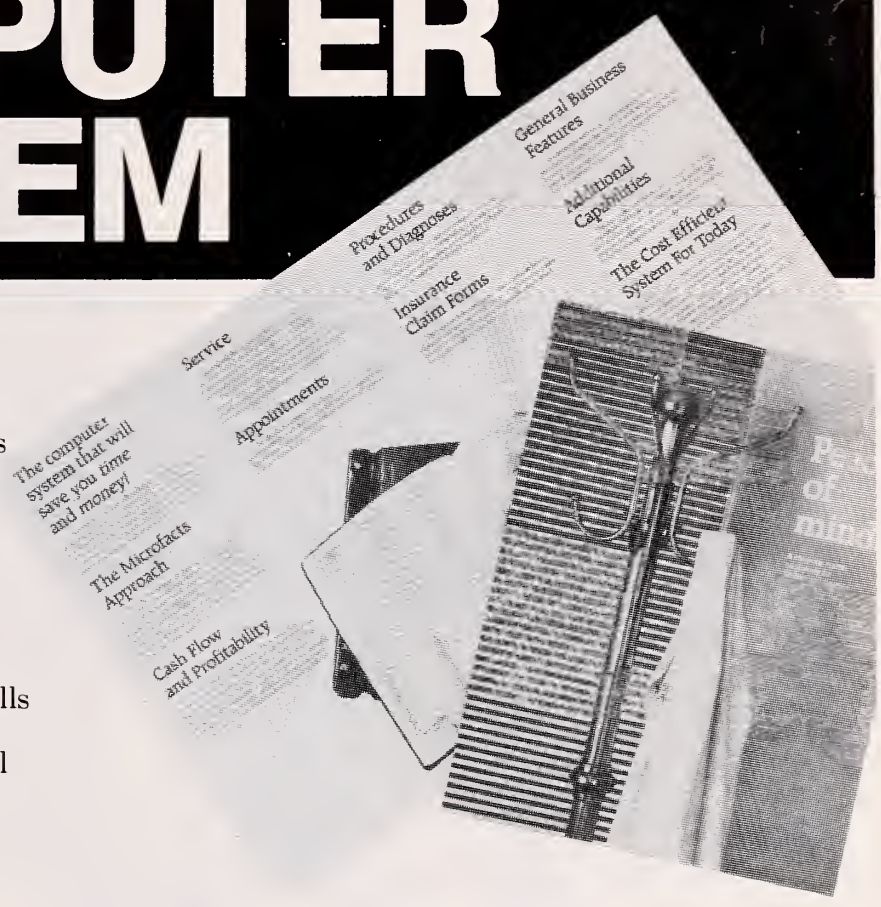
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References: 1. Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME. Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237. 2. Watkin DM: Nutrition for the aging and the aged, chap. 28, in *Modern Nutrition in Health and Disease, op. cit.*, p. 781. 3. Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease, op. cit.*, pp. 1084, 1089, 1114. 4. Dixon RE: *Ann Intern Med* 89 (Part 2): 749-753, Nov 1978. 5. Committee on Dietary Allowances, National Research Council: Recommended Dietary Allowances, ed 9. Washington, National Academy of Sciences, 1980, p. 13.

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When **impotence** is due to androgenic deficiency.

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejeculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberel cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D. Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy*, Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cyptorchidism.

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Brief Summary of Prescribing Information (see attached)

Brief Summary of prescribing information

RU-TUSS®

TABLETS

INDICATIONS AND USAGE: Ru-Tuss Tablets provide relief of the symptoms resulting from irritation of sinus, nasal and upper respiratory tract tissues.

CONTRAINDICATIONS: Hypersensitivity to antihistamines or sympathomimetics. Ru-Tuss Tablets are contraindicated in children under 12 years of age and in patients with glaucoma, bronchial asthma and women who are pregnant. Concomitant use of MAO inhibitors is contraindicated.

WARNINGS: Ru-Tuss Tablets may cause drowsiness. Patients should be warned of possible additive effects caused by taking antihistamines with alcohol, hypnotics, sedatives or tranquilizers.

PRECAUTIONS: Ru-Tuss Tablets contain belladonna alkaloids, and must be administered with care to those patients with urinary bladder neck obstruction. Caution should be exercised when Ru-Tuss Tablets are given to patients with hypertension, cardiac or peripheral vascular disease or hyperthyroidism. Patients should avoid driving a motor vehicle or operating dangerous machinery (See WARNINGS:).

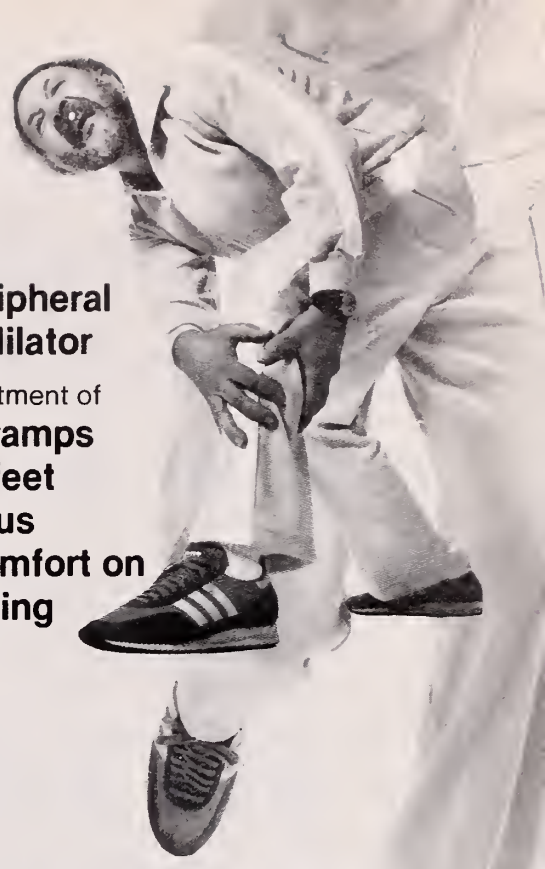
OVERDOSAGE: Since the action of sustained release products may continue for as long as 12 hours, treatment of overdoses directed at reversing the effects of the drug and supporting the patient should be maintained for at least that length of time. Saline cathartics are useful for hastening evacuation of unreleased medication. In children and infants, antihistamine overdosage may produce convulsions and death.

ADVERSE REACTIONS: Hypersensitivity reactions such as rash, urticaria, leukopenia agranulocytosis, and thrombocytopenia may occur. Other adverse reactions to Ru-Tuss Tablets may be drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension/hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerostomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, dizziness and insomnia. Large overdoses may cause tachypnea, delirium, fever, stupor, coma and respiratory failure.

DOSAGE AND ADMINISTRATION: Adults and children over 12 years of age, one tablet morning and evening. Not recommended for children under 12 years of age. Tablets are to be swallowed whole.

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Each yellow tablet contains:
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Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

LIPO-NICIN®/100 mg.

Each blue tablet contains:
Nicotinic Acid 100 mg.
Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 5 tablets daily.
AVAILABLE: Bottles of 100, 500.

Indications: For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

Side Effects: Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

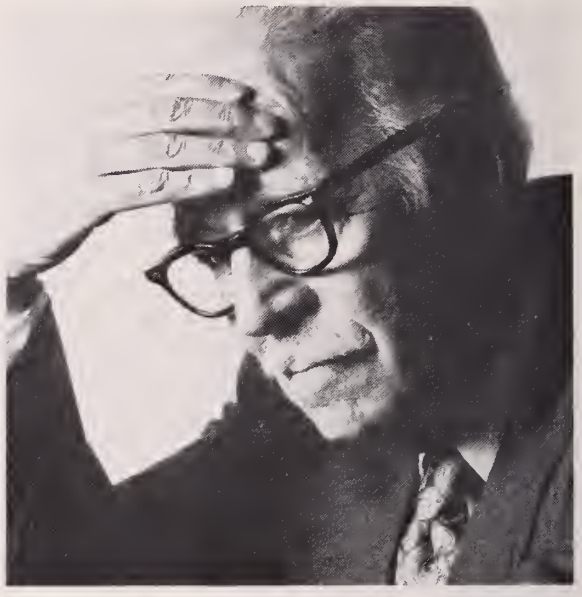
Contraindications: Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

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DOSAGE: One ISO-BID capsule every 12 hours on an empty stomach according to need, for continuous 24-hour therapy. Some patients may require higher dosage levels. In these patients, dosage should be titrated, and they may require two ISO-BID capsules b.i.d. Not intended for sublingual use. Consult product brochure before prescribing.

THERAPEUTIC FOOTNOTE: IN TREATING ANGINA ... FAILURES MAY RESULT FROM INADEQUATE DOSAGE. Reports in the literature indicate the usefulness of higher dosage levels of isosorbide dinitrate.[1-3]

INDICATIONS: Based on a review of this drug by the National Academy of Sciences — National Research Council and/or other information, FDA has classified the indications as follows:

"**Possibly**" **effective:** For the relief of angina pectoris (pain of coronary artery disease). ISO-BID is not intended to abort the acute anginal episode, but is widely regarded as useful in the prophylactic treatment of angina pectoris. Final classification of the less-than-effective indication requires further investigation.

CONTRAINDICATION: Idiosyncrasy to this drug.

WARNINGS: Data supporting the use of nitrites during the early days of the acute phase of myocardial infarction (the period during which clinical and laboratory findings are unstable) are insufficient to establish safety.

PRECAUTIONS: Use with caution in patients with glaucoma. Tolerance to this drug, and cross-tolerance to other nitrates and nitrites may occur.

ADVERSE REACTIONS: Cutaneous vasodilation with flushing. Headache may commonly occur, and may be both severe and persistent. Transient dizziness and weakness, in addition to other signs of cerebral ischemia associated with postural hypotension may occasionally be seen. ISO-BID can act as a physiological antagonist to norepinephrine, histamine, acetylcholine and many other medications. An occasional patient may show marked sensitivity to the hypotensive effects of nitrite; severe responses (nausea, vomiting, weakness, restlessness, pallor, excessive sweating and collapse) can occur, even with the usual therapeutic dosage; alcohol may enhance this effect. A drug rash and/or exfoliative dermatitis is occasionally seen.

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1. Shane, S.J.: Canadian Family Physician. November 1973. 2. Lemberg, L.: Practical Cardiology. February 1976.
3. Abrams, J.: New England Journal of Medicine. May 29, 1980.

PRESIDENT'S PAGE

You can do it



You may think that your FMA Leadership is doing nothing else this year other than to talk about the "Professional Liability Crisis". You have read about this problem in every publication that we distribute. Your local county medical society officers and staff have been repeating the same theme over and over. Are you fed up? Are you angry? Are you concerned? Most importantly, are you AWARE?

Those four questions should bring forth answers that result in zero, two for and two against. Does zero mean to do nothing? Does zero mean that we are now at a starting point ready to proceed? I answer affirmatively to the latter question.

In this issue of your *Journal of the Florida Medical Association* you have been presented the latest and most complete information regarding the PLI problem that is available. This information is the result of weeks, months, and years of accumulated knowledge and experience about this issue. Your FMA has been concerned for at least seven years about how this problem could be resolved on a long term basis. We are now at another crossroad that presents challenges heretofore never experienced — escalating premiums for professional liability insurance that are reaching non-affordable levels. Not only that the premium cannot be paid by the physician, but can it be afforded by the patient who has to pay higher charges for physician fees?

You have, on numerous occasions, been provided with detailed information in the program of "Reason '83" being proposed to the legislature by your FMA to solve this problem. You have listened to your fellow colleagues who are knowledgeable about this subject in a effort to enhance your understanding of the scope of this problem. Now you have before you this *Journal* which again reiterates the problem and the thoughtful proposals to solve it. What else can be done to enhance the knowledge of our FMA membership? Have we done our job?

Let me offer to you what I think must be done *now* and in the coming weeks and months if we are going to have a chance of success with our programs. You, the educated physician, the authority in health care, the respected member of your community, you are the one who must take the lead from now on.

You know that the problem is of even greater magnitude for your patient. You know that each citizen of Florida must understand the consequences if this program is not successful. Can the citizens of Florida afford to pay, or even be expected to pay, continual increases in fees for medical services when such increases contribute nothing to the quality of delivering that service? Can our third party carriers - private or government - afford to assume such a financial obligation?

These are questions that only you, the primary source of providing medical service, can answer. Your awareness and understanding of this problem enables you to mobilize the best resources possible to you to help in guiding all of us to a satisfactory solution.

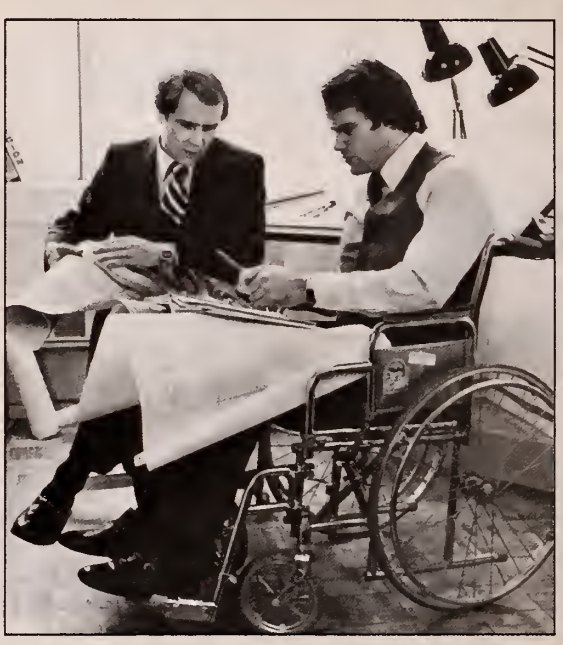
You are the one! We are now at a crucial time when your individual response and involvement will be a key factor responsible for a positive result. If you do not feel that you are intregal and vital to the success, then there is no way that those less knowledgeable, and in fact, ignorant of the problem, can ever be expected to rally around the cause and support this effort.

Yes, you are it — I am it! We are on the line! You are the catalyst necessary to achieve success! I am confident it can be done — you and I only have to do it! The alternative makes anything less totally unacceptable.

Robert E. Windom, M.D.

P.S. You will recall that with the approval of the House of Delegates in 1982, all FMA active members received a mandatory assessment of $50.00 last Fall to assist in the cost of carrying out the FMA's comprehensive professional liability program. These funds are essential to our success. If you are one of those who have not yet paid the assessment, it will be greatly appreciated if you will send in your $50.00 today.

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Confidence is our commitment. The Uri-Drain® Male Urinary Control *System* was designed with the incontinent male's life-style in mind. Engineered component by component to be virtually accident-proof, the Uri-Drain system helps assure confidence and dignity in any situation.

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Heat-welded seams help prevent leakage and triple reinforcement of strap slots reduces the possibility of tearing.

Reusable* Deluxe Uri-Drain® Leg Bag features tapered design and two leg straps for optimum fit and concealment.

Permanently bonded stepped connectors (top and bottom) fit a wide range of connective tubing sizes.

Extension tubing allows user to direct stream to desired receptacle when emptying.

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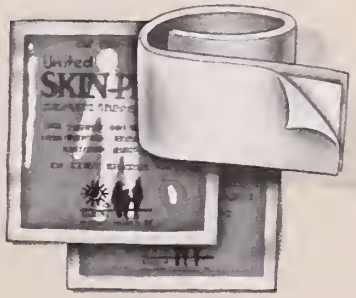
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Immediate Past President, Florida Medical Association

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Continuing protection. For life.
That's important. And unusual. Group term life insurance coverage by its very purpose and nature terminates or drastically diminishes when you retire. And the cost of continued coverage can be prohibitive. The FMA-sponsored Wraparound Retired Lives Reserve, on the other hand, picks up coverage on a prepaid basis *even after you retire and stop paying premiums.*

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Tax-deductible premiums.
One of the most advantageous—and unique—features of the FMA-sponsored Retired Lives Reserve is its tax-favored position. The premium rates, to begin with, are extremely attractive. And their tax-deductible status to corporations reduced your actual cost even more.

Your estate is protected. And productive.
High-value continuing coverage and tax-deductible premiums are obvious advantages. But there's more. Consider also that your post-retirement coverage provides a potential source of income-producing assets to your estate for your heirs. And the surety of a solid estate base allows you the option of converting other policies to annuity status for additional retirement income.

For FMA members only.
The FMA-sponsored Retired Lives Reserve is restricted to member physicians and their staffs.

No medical examination.
A medical examination is not required for eligibility.

Get the facts.
Space does not permit all of the outstanding benefits of the Wraparound Retired Lives Reserve program to be listed here. The FMA and MAPS urge you to acquaint yourself with the numerous benefits of this customized Retired Lives Reserve program. Mail the attached postcard to arrange a confidential appointment with a MAPS representative to see what this innovative plan can mean to you.

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J-9043-4 July 1981



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National Committee for Prevention of Child Abuse

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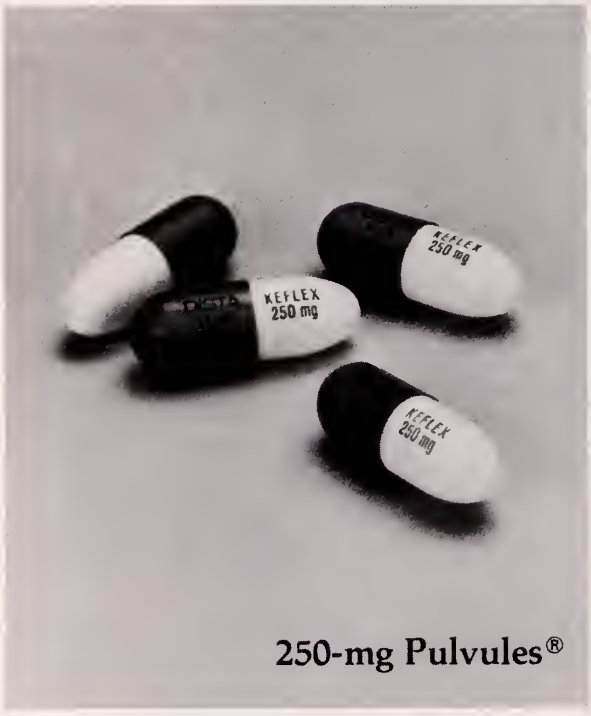
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The case for organized medicine

During the current FMA year, I have read with great interest President Robert Windom's exhortations concerning the importance of membership in all levels of organized medicine. To date, there are in excess of 14,000 FMA members among approximately 19,000 licensed physicians practicing in the state of Florida. Because of a concerted membership drive, the number of Florida physicians belonging to the AMA has reached 10,000; this represents a net gain of 3,000 members and entitles the FMA to three new delegates bringing the total to 11. Although the aforementioned figures are encouraging, there is still need for improvement particularly when one considers the magnitude of present problems confronting the medical profession.

It is of the utmost importance for both physicians and their spouses to recognize that the medical profession is under attack! Not only are our old enemies continuing to chip away at medicine's foundation but also many traditional friends have joined the attack. In an editorial published in *The Capital Medical Society Newsletter*, (February 1983), Dr. James Conn called attention to recent derogatory statements of newspaper columnists James J. Kilpatrick and Mary McGrory. Mr. Kilpatrick referred to the AMA's effort to curb FTC control of the medical profession in the following words: ". . . a shameful team of doctors lobbying for one of the worst bills to be considered by the 97th Congress . . . this was an occasion for contempt." Ms. McGrory commented that the Lame Duck Session of Congress got some ". . . generally dreadful reviews, but some people think it redeemed itself by handing the AMA its head on a platter." At the January FMA Leadership Conference in Orlando, Mr. Roy Pfautch (FMA Public Relations Consultant) indicated that the professional liability crisis is merely the tip of the iceberg in terms of overall problems facing organized medicine. The most important crisis that is coming is the possible dissolution of medicine as we know it and its ultimate socialization — or worse, it's conversion to a "public utility."

At no time has it been more important to support our county, state and national medical associations. Every member of the foundation adds strength and unity without which we cannot hope to achieve our aims. Even those members unable to participate actively exert a significant impact by adding their personal endorsement and financial support. The bottom line has been aptly and succinctly summarized by Dr. Rufus Broadaway (AMA Trustee from Miami): "Remember who is for you — your county, state and national associations".

Daniel B. Nunn, M.D.
Editor
Jacksonville

Toward serving the exceptional

It was not unusual for the telephone to ring at 6:00 a.m. with a teacher or houseparent on the line informing me with a slight hint of relief in her voice that she was ill and could not make it to work. I was used to such calls after two years serving as Director of the Program for Multihandicapped, Georgia Academy for the Blind, and expected nothing out of the ordinary. But this day was different. Stanley, a 16-year-old blind, brain-damaged, paraplegic student, had stopped breathing. The nurse had checked on him a few minutes earlier as she routinely did with all the students in the boys dormitory, and Stanley was cold to the touch and would not respond. Of course, she tried CPR and the ambulance was on the way; "but you'd better come on," she said, "this child is dead."

A severe epileptic seizure from which Stanley never regained consciousness was the Medical Examiner's report. From a massive shotgun wound to the head at an early age, the autopsy produced countless metal pellets still embedded in the brain.

The next day all the students would be leaving for the short summer break. Some would return to a loving home while a most unhealthy family situation awaited others. And far too many would be simply shuttled off to some other phase of institutional existence.

Every physician as well as any professional whose duties include the day-to-day care of other human beings can empathize with the sense of helplessness and defeat felt that summer morning. The fact that it was one day away from the effective date of my resignation did nothing to ease the pain or relieve me of a nagging feeling of responsibility.

That experience was almost four years ago, three years after passage of the Education for All Handicapped Children Act of 1975, referred to as Public Law 94-142. As with any law dealing with social change, there is inevitably many years of lag time between intent and full implementation. Elementary physics teaches us that for every force there is a counter force and the impetus for the rights of the handicapped as well as other minorities has traditionally been met with resistance.

For those whose professional lives touch the acutely and chronically ill, and the physically, mentally or emotionally handicapped, the realization soon becomes abundantly clear that success is not absolute but a matter of degree. And the Florida Medical Association should rightly be proud of its leadership in the struggle toward providing those children and adults labeled "exceptional" with greater access to appropriate services through increased physician and community involvement and understanding.

Impressive measures have been recently taken by members of the Association to focus upon the intent of P.L. 94-142 and even more emphasis is planned for the future. As activities of the new year progress to fruition, it is entirely appropriate to reflect upon efforts of the Association since the 108th Annual Meeting last May.

Upon assuming the office of President, Florida Medical Association Auxiliary, there was no question in the mind of Mrs. Daniel B. Nunn (Gloria) that Learning Disabilities would be the focus of the Auxiliary for 1982-83. With the assistance of her project chairman, Mrs. James Jude (Sallye), the Auxiliary sponsored a most informative Forum on Learning Disabilities at the Fall 1982 Conference and a Special Auxiliary Issue of *The Journal of the Florida Medical Association, Inc.* on Learning Disabilities is currently being planned.

The Council on Medical Services, chaired by Roy M. Baker, M.D., has been dealing with issues on medically related services to handicapped school children through its Committee on School Health. And the Committee on Substance Abuse continues to concern itself with problems associated with drug abuse and disabling emotional handicaps. Moreover, President Robert E. Windom, M.D., has recently offered the assistance of the Florida Medical Association to the Florida Department of Health and Rehabilitative Services in an effort to strengthen capabilities of delivering direct medical care to developmentally disabled and other clients served in institutions and communities throughtout the state.

The remarkable Helen Keller, who overcame the dual-sensory deprivation of blindness and deafness, once said,

> I have walked with people whose eyes are full of light but who see nothing of sea or sky, nothing in city streets, nothing in books. It is far better to sail forever in the night of blindness with sense, and feeling, and mind, than to be content with the mere act of seeing. The only lightless dark is the night of darkness in ignorance and insensibility.

The concerned members of the Florida Medical Association who choose to extend their considerable knowledge and skills to acquire a better understanding of the complex medical and educational needs of the handicapped should be commended.

Robert C. Fore, Ed.D.
Executive Editor
Jacksonville



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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION, INC.
MARCH 1983 Vol. 70, No. 3

Report of the FMA committee on professional liability

T. Byron Thames, M.D.

Since this Committee's creation in 1981 by Immediate Past President, Sanford Mullen, M.D., it has been engaged in an indepth review of the current status of professional liability in the State of Florida as it affects the medical profession and, specifically, members of the Florida Medical Association. An initial report by the Committee providing a review of the professional liability situation in Florida was presented to and adopted by the Florida Medical Association Board of Governors on October 8, 1981. (See *The Journal of the Florida Medical Association*, Vol. 68, No. 11.) This report served as the framework and foundation for the continuing deliberations of the Committee that culminated in its specific recommendation to the public, to the judiciary and to the legislature. Those recommendations were adopted by the Board of Governors of the FMA in August of 1982.

Committee deliberation • After the 1982 meeting of the FMA House of Delegates, it was apparent to the Board of Governors that professional liability would be the central issue for the Association during the coming year. Accordingly, FMA President Robert Windom, M.D. expanded the Professional Liability Committee to include the following members: Vernon B. Astler, M.D.; Jack A. MaCris, M.D.; A. Fred Schild, M.D. and Jerry D. Moore, M.D. in addition to T. Byron Thames, M.D. as Chairman. During the numerous committee meetings during the summer of 1982 this Committee was assisted in its deliberations by FMA Officers, representatives of the Council on Legislation, consultants and staff.

During the initial meeting, the Committee accomplished a comprehensive review of past activities in respect to tort reform that had been proposed by the Florida Medical Association. It should be noted that since 1975, FMA has expended a great deal of time, energy and money in accomplishing tort reforms.

The Author
T. BYRON THAMES, M.D.
Dr. Thames is a Past President of the Florida Medical Association and Chairman of the Special Committee on Professional Liability Insurance.

However, it was further noted that notwithstanding these reforms, the medical profession was faced with another serious medical malpractice crisis.

The Committee sought the advice of insurance experts, legislative consultants and others in formulating its recommendations. In addition to this, the Committee determined that the Florida Supreme Court did not wish to interject itself into attempting to resolve the professional liability problems being experienced in the State. During the numerous meetings of the Committee, information was also received from county medical societies, other states, and numerous individuals who are concerned about this situation.

It is important to note that the survey reflected that the overwhelming majority of the citizens expressed strong confidence in their individual physician and the quality of medical care in this state.

Each concept was reviewed individually and our consultants surveyed the key leadership of the House and Senate as to the feasibility of our program and other options which the leadership of the House and Senate felt were viable. In addition to this information, Mr. Roy Pfautch, the FMA Public Relations Consultant presented the results of a public opinion survey relative to the public sentiment in regard to the various aspects of the malpractice crisis and the potential for public support in resolving this crisis. It is important to note that the survey reflected that the overwhelming majority of the citizens expressed strong confidence in their individual physician and the quality of medical care in this state. The survey also reflected a broad recognition and an informed knowledge of the professional liability problem, as well as significant support for innovative proposals for long term solutions in resolving this problem.

Committee's recommendations • After careful consideration of the numerous options, the Committee recommended to the Board of Governors that the following program be adopted. The three-fold program includes fundamental reforms in the tort system, proposals for court rules and a long term proposal dealing with constitutional revision.

I. *Legislative recommendations*

A. Mandatory statutory periodic payment of all future economic damages such as hospital and medical bills, loss of earnings or earning capacity with the reverter of unexpended funds for medical expenses to the party paying these expenses should the claimant die or some other event occur where funding is no longer necessary, prior to the termination of the period of years during which such payments are to be made, and that this provision be applicable to all personal injury cases.

B. Transfer of punitive damage allegations from civil litigation cases to the criminal court system with damages payable to the State of Florida.

C. Removal of joint and several liability in personal injury cases.

D. Determination of attorneys' fees, (pursuant to the New Jersey approach), pursuant to a schedule based upon the amount of recovery in civil litigation.

E. Mandatory-statutory limitation ($250,000) on recovery of damages for pain and suffering and other noneconomic losses; mental anguish, disfigurement, loss of capacity for enjoyment of life, etc., that would be applicable to all personal injury cases.

F. Establishment of a statutory provision regarding the application of the summary judgment procedure in all civil cases.

G. Strengthening of the existing statute relative to remititur additur.

II. *Judicial petitions*

That the Florida Medical Association file necessary and appropriate petitions with the Florida Bar and the Supreme Court relative to A) the establishment of the New Jersey concept for contingency fees, B) a stronger court rule regarding the application of the summary judgment rule, C) a pretrial screening panel mechanism for the resolution of medical malpractice actions.

III. *Constitutional revision concepts*

A. Creation of a new right in Article 1 of the Florida Constitution entitled "Rights of Defendants in Civil Actions" that would provide for summary judgments, limitation on general and noneconomic damages and for the elimination of joint and several liability.

B. Removal of the requirement that a Justice of the Supreme Court be a member of the Florida Bar (an attorney), thus opening membership on the Supreme Court to non-lawyers. (Same qualifications as Governor).

C. Removal of attorneys from the jurisdiction of the Florida Supreme Court and their regulation by general law in the same manner as other professions, e.g., Department of Professional Regulation.

D. Repeal of provisions of the Constitution relating to the Judicial Nominating Commission for Supreme Court Justices, thus requiring Supreme Court Justices to be elected by the electors of the State, as other State and County officials are elected, e.g., by partisan elections.

E. Requirement that the Supreme Court by rule establish a procedure for the processing of medical malpractice action with the view toward discouraging baseless actions and encouraging settlement of those actions based on reasonable medical probability, e.g., the creation of a court rule of pre-trial screening panels.

The Insurance Commissioner's Council on Medical Malpractice • Almost concurrent with the increased activity of the Professional Liability Committee in June of 1982, the Insurance Commissioner of the State of Florida created the Advisory Council on Medical Malpractice. This council was created shortly after the problems in the spring of 1982 had surfaced in respect to significant rate increases for members of the Patient's Compensation Fund.

No one is underestimating the difficult task that we face in enacting these proposals.

I served on this Committee as a representative of the Florida Medical Association. Other physicians serving on the Committee included Jerry Moore, M.D., a member of the Professional Liability Committee and Stanley Margulies, M.D., a physician from the Broward County area. In addition to the three physician members of the Committee, the remaining members included attorneys, a hospital administrator and several individuals with insurance backgrounds. The Committee was exposed to many solutions throughout its seven month tenure in which it took testimony from many interested parties. The report of the Committee, has been submitted to the Insurance Commissioner for his

review. In the opinion of those physicians who have been involved in the Committee deliberations and who have studied the report, we are of the opinion that the recommendations will do very little now or in the future to stem the tide of increasing cost of professional liability insurance. Without some significant modifications by the Insurance Commissioner we would continue to feel that the only viable way to bring expeditious relief to the problem would be through the tort reform proposals of the Florida Medical Association.

The road to enactment • The specific bills implementing the FMA Legislative Program have been drafted and are in the process of being introduced in both the House and the Senate. No one is underestimating the difficult task that we face in enacting these proposals. However, it is our considered opinion, that unless major changes in the tort system are accomplished, little or nothing will be done to stem the tide of the spiraling cost of professional liability insurance that results in the ever increasing cost of health care that must be passed on to our patients.

The legislative forum is one in which we would all hope that logic and reason would prevail. In order for the physicians of the Florida Medical Association and ultimately their patients to prevail on this issue, it is incumbent that every member of the Association affected by this problem become knowledgeable and active in the support of this program. Education of your patients, community opinion leaders, boards of trustees of your hospitals and key business leaders is necessary in order that the members of the legislature recognize that this is an issue which affects and is important to each and every citizen of the State of Florida. Every resource available to the Association for implementation of this program will be utilized. However, it can not be emphasized enough that without individual physician, patient and community leadership support that such a far reaching legislative program will be difficult to adopt.

Summary • It has been my pleasure to serve as Chairman of the Professional Liability Committee during the last two years. I believe that through the service of the other committee members and the other numerous individuals who have assisted the Committee, that a viable and achievable program for resolving this crisis once and for all is now in place. I believe that we have put together the necessary expertise in terms of consultants and staff to bring about a successful presentation of our program to the Florida Legislature. The remaining "natural resource" which we have available to us of course is the physician and physician's spouse. Through direct physician and spouse contact with patients, boards and other business enterprises, we can achieve a unity of effort that will require nothing less than a positive response and a final and absolute solution to the current crisis.

• Dr. Thames, P.O. Box 8908, Orlando 32806.

Your Reciprocal reports

Vernon B. Astler, M.D. and W. Harold Parham, D.H.A.*

When the members of the Florida Medical Association felt the crushing blow from all major insurance companies leaving the state of Florida, and the FMA group program with the Argonaut Insurance Company being challenged in the Federal Courts in the Spring of 1975, it was quite obvious that the availability of professional liability insurance would be non-existent by year end.

The leadership of the FMA recommended and the Board of Governors and the House of Delegates directed that an insurance mechanism be established, free standing, independent of government subsidization in the private sector. This resulted in the establishment of the FMA PLI Trust in 1975. It commenced writing professional liability indemnification on December 1, 1975, and was replaced by the Florida Physicians' Insurance *Reciprocal* on December 31, 1976, due to the undesirability of the Trust's assessability feature.

PIMCO (Professional Insurance Management Company), established by the FMA was the successor to Harlan-Med, Inc. (an insurance company partially owned by the FMA) to serve as a general insurance agency to administer the FMA- sponsored programs and to serve as the management company for the Trust and the Reciprocal.

The Florida Physicians' Insurance Reciprocal offers a basic policy of $500,000 with multiples for excess coverage up to $6,500,000. There is no aggregate; it is modified claims-made, with a provision for death, disability and normal retirement.

The Reciprocal enters its eighth year of providing insurance coverage with the history of one dividend in 1977 and an increase in premiums of 26% in 1981; 30% in 1982; and 30% in 1983. These increases in premiums have been directly related to the increase in frequency and the severity of claims which is particularly due to the erosion of the Tort Reforms passed by the Florida Legislature and either disregarded or declared unconstitutional by our Judiciary.

Increase in Frequency and Severity • Since the inception of our program, there has been an increase in frequency as expressed per 100 physicians of 300%; and during the same time the average cost per claim, i.e., severity, has increased 350%. At year end 1982, the Reciprocal had paid or reserved 436 claims in excess of $100,000 and prior to 1968 there were none. There were no claims exceeding $1,000,000 prior to March 1979; now such awards have become rampant.

There were no claims exceeding $1,000,000 prior to March 1979; now such awards have become rampant.

Beginning in 1983, the Reciprocal offers first and second year physicians a premium that is highly competitive and should be equivalent and comparable to similar coverage offered by any other carrier in Florida. To accommodate individual physicians or physicians in groups desiring deductibles, the Reciprocal now provides policies with deductibles in the amount of $25,000-$50,000-$75,000-$100,000 with the appropriate reduction in premiums up to 42% to accommodate the lesser liability by the company.

The Reciprocal is the only physician-owned medical society-sponsored, professional liability insurance carrier in the state of Florida, and while other carriers have reentered the market to provide coverage for physicians, only time will tell if they will once again abandon us as they did in 1975.

The Reciprocal was, from its original concept, free standing in the private sector and totally independent for its basic coverage, its reinsurance, and excess coverage. It remains committed to a policy of fiscal, actuarial soundness. Because of its commitment to fiscal and actuarial soundness, the Reciprocal enjoys continuous and uninterrupted support of many of the major reinsurance markets primarily in London, including Lloyd's of London.

*Dr. Astler is the Public Relations Officer and a Past President of the FMA; and Chairman of the Board of the Reciprocal. Dr. Parham is Executive Vice President of the FMA; Attorney-in-Fact/President of the Reciprocal; and Chairman of the Board of PIMCO.

These are the bedrock supports that will enable your Reciprocal to continue to measure and provide responsible protection to the participating insureds in this program.

The Reciprocal has been extremely active in providing risk management seminars, peer underwriting, and peer claims review and has one of the most efficient management organizations in the country, i.e., its subsidiary, PIMCO.

No individual with reason and logic may refute the fact that we are faced with a severe malpractice crisis, not from the standpoint of availability, but from the spiraling uncontrolled cost and excessive amount of monies being paid for liability in this state when in many instances there is no negligence, i.e., awards are being made on death and disability when there has been no negligence on the part of the physicians involved.

- Dr. Astler, 2800 S. Seacrest Blvd., Boynton Beach 33435.

Summary of Financial Report as of December 31, 1982:

For Year Ended December 31, 1982

Total Premium for Insurance Coverage		$36,951,262
Less: Reinsurance paid for coverage in excess of $250,000 retention		(19,928,411)
Unearned premium for death, disability & normal retirement		(31,705)
NET PREMIUMS WRITTEN		$16,991,146
Losses: (Incurred Losses)	(17,760,985)	
(Loss Expense)	(7,853,365)	25,614,350
Corporate Expenses — Attorney-in-Fact		823,375
Management Fees Paid — PIMCO		1,925,300
NET UNDERWRITING (LOSS)		(11,371,879)
Net Investment Income Earned	$8,226,376	
Net Realized Capital (Loss)	(1,452,574)	
NET INVESTMENT GAIN		6,813,802
		(4,558,077)
Federal Income Tax		-0-
NET INCOME (LOSS)		($4,558,077)
Capital & Surplus Account		
Surplus 12/31/81		$8,774,091
Net Income		(4,558,077)
Subscribers Deposits		1,497,375
Net Unrealized Capital Gain		1,906,691
Statutory Adjustment		(45,233)
Surplus 12/31/82		$7,574,847

A measure of crisis

Robert E. Windom, M.D. and Donald C. Jones

The Academy of Florida Trial Lawyers which represents 900 plus trial attorneys in Florida, many of whom stalk and litigate alleged medical malpractice claims, says that Florida physicians have trumped-up a phony crisis to generate an atmosphere of hysteria over medical malpractice costs. The Trial Bar has charged that the medical profession is seeking to further insulate doctors from liability for malpractice — all in the name of "self-preservation of a privileged class."

The medical profession is indeed privileged to be able to practice the noblest of professions in a free society. Medicine is likewise totally committed to the preservation of our private free enterprise system of health care delivery which has provided Americans with the highest quality medical care and quality of life anywhere in the world. As to the claims of a phony crisis, an analysis of the facts tell a far different story.

The medical malpractice crisis is but one ugly manifestation of a hydra-headed litigation problem that has erupted in frightening proportions affecting virtually every segment of society...

The medical malpractice crisis is but one ugly manifestation of a hydra-headed litigation problem that has erupted in frightening proportions affecting virtually every segment of society including business, industry and the public, both individually and collectively.

The Authors
ROBERT E. WINDOM, M.D.
DONALD C. JONES
Dr. Windom is President and Mr. Jones is Executive Director of the Florida Medical Association.

"The Paper Chase" as the growing legal malaise in this country was recently referred to in one of a proliferation of articles, is threatening our economic foundations. Moreover, the moral fiber of the public's conscience is being tested as perhaps never before in our history; what is right and wrong, just and fair, when does compensation for injury become avarice and greed.

The legal crisis we are facing has been examined and lamented by many, including those who are feeling the brunt of the problem as well as those who measure its economic and social impact on society.

U.S. Chief Justice Warren Burger has called for sweeping changes to help curb the litigation explosion and ease the burden on the courts. He cites an increase in case filings between 1940 and 1981 in Federal District Courts from 35,000 to 180,000 annually, a figure that reflects an increase in cases that has been six times as fast as our population. In an address before the U.S. Chamber of Commerce, the Chief Justice said there has clearly been a rise in the litigious attitude of Americans and that "America is in danger of being overrun by hordes of lawyers hungry as locusts." He called for arbitration as a viable way to bring relief to both the injured party and the growing backlogs in the courts.

Whether by coincidence or correlation, the filing of some five million civil and criminal cases annually by what observers call "litigation happy Americans" parallels the rapid growth in the ranks of lawyers as approximately 35,000 new attorneys are entering practice annually, swelling the ranks to over 610,000 nationwide, or about one lawyer for every 385 Americans. The nation's largest law firm is American Telephone and Telegraph Company with more than 900 counselors, and big business alone is paying legal fees that have soared to over $25,000,000,000 annually.

Thomas McNamara, an official of the American Bar Association, has said, "There is a mentality in the population that for every harm there must be a remedy of money and a significant part of the population is hoping to fall down and retire with a crippling injury." Convincing evidence of our suing society was reported in an article in the December

1982 issue of *U.S. News and World Report* entitled "See You In Court". The evidence is disheartening-ly real that Americans are streaming to court in record numbers whether in contention of a crippling injury, violation of a constitutional right or even something as ludicrous, but real, as a prize missing from a box of Cracker Jacks. According to the article the variety of possibilities in the "Sue Machine" is limited only by ones imagination; some of the more prominent being palimony, product liability, malpractice, municipalities, educational institutions, etc. The potential list of "sue-ees" is also impressive, including even our own parents and children.

Professor A. E. Dick Howard of the University of Virginia Law School aptly captured the moral implications of the litigation issue when he observed: "Our colonial forebearers would be struck dumb by the explosion of law and litigation in 20th Century America."

The report's assessment of the causes and effects is a reasonable conclusion based on the evidence. The article cites the issues around which litigation swirls as ranging from questions of policy, such as antitrust and environmental regulations, to alleged injuries of all kinds, whether the cause be asbestos or other toxic substances, bias in hiring and promotion, a surgeon's unsteady knife, a defective product or almost anything else. According to the article, the most tangible effect of the lawsuit binge is economic. Prices, insurance rates and taxes all must rise to cover the added legal costs. Another suggested effect is governmental; the power of the judiciary is sharply on the rise as judges constantly expand individual rights.

The full repercussions are seen as being much broader — and more subtle. "As employees sue employers, students sue teachers, taxpayers sue bureaucrats and friends sue friends, trust is undermined and creativity discouraged."

"Companies are more conservative in development of products, and doctors go into specialties with less exposure to malpractice claims," says Donald Hirsch of the Defense Research Institute, a group of defense lawyers.

One cause of the avalanche of lawsuits, many experts assert, is the gradual weakening of social units such as families, churches and neighborhood groups that traditionally have helped keep disputes out of court. In a report done for the council on the Role of Courts, a group of legal experts concludes that today's galloping litigiousness "stems not only from 'social fragmentation' but also from technology that 'in our more complex society' is 'capable of causing ever more severe injuries in ever greater numbers'."

Evidence of the crisis ● The evidence of a litigation crisis is overwhelming and those who decry the medical professional liability crisis as false hysteria could soon find themselves being devoured by the multifarious regeneration of the very Hydra they have loped off.

In 1981, insurance companies that provide professional liability insurance protection to Florida physicians doled out more than $25,000,000 to patients who sued doctors and hospitals. In 1982, this figure escalated upward and *a single award* amounted to half that much. The Florida Physicians' Insurance Reciprocal, which covers in excess of 5,000 physicians in Florida, paid out claims totaling approximately $40,000,000 and claims reserved increased an additional $24,000,000 in 1982 stemming from some 1,400 claims for alleged malpractice. In the month of December alone, the FPIR paid out five claims totaling in excess of $7,000,000.

Florida's patient compensation fund set up in 1975 has paid out $127,000,000 more in claims than it collected in premiums due to multi-million dollar settlements and jury verdicts.

The total premium paid by Florida physicians during 1983 for professional liability insurance will exceed $100,000,000. Nationally, it will exceed one billion dollars. Premiums paid by hospitals will reach comparable heights. It is projected that the many doctors in Florida will be paying premiums in excess of $46,000 a year by 1985, and that within 10 years the figure will exceed $99,000. This is not wild speculation but the sober projection of recognized insurance actuaries.

The environment in which we live causes many physicians to practice "defensive medicine". It has been estimated that 30 to 40% of all diagnostic procedures ordered by physicians are attributable to the practice of defensive medicine.

The environment in which we live causes many physicians to practice "defensive medicine". It has been estimated that 30 to 40% of all diagnostic procedures ordered by physicians are attributable to the practice of defensive medicine. Because they face the ever increasing prospect of being sued if something should go wrong, many doctors are forced to practice this type of medicine.

A survey was conducted in January 1983 by the Professional Insurance Management Company (PIMCO) for the Florida Physicians' Insurance Reciprocal in order to examine the practice of defensive medicine by Florida physicians. Questions with additional inquiries were asked of 30 physicians from the specialties of Internal Medicine, Pediatrics, Neurology, Cardiology, Family Practice and Gastroenterology in different areas of the state. An analysis of this survey revealed that 33% of the physicians had been sued for an alleged failure to perform a diagnostic test at least once. A fear of being sued for failure to perform tests was encountered by 20% of the respondents.

Sixty-three percent of the respondents said they were ordering more tests than were necessary in order to protect themselves. The cost of these additional tests ranged from $8 to $450 per patient with 16 different tests frequently mentioned such as x-rays being repeated, unnecessary CAT scans, blood tests, spinal taps, GI series, etc. Additional tests have been estimated to increase the cost of hospitalization on an average of about 15% and a prolongation of the hospital stay of over one day.

Today, Florida ranks *third* among all the states in the number of million dollar verdicts and *first* in the average size of jury awards.

Respondents pointed out that this additional testing may well raise the incidence of injury to the patient. Such injuries included esophageal perforation, perforation of the colon, dye contrast reactions, CAT scan complications and added discomfort. Five physicians pointed out that they would have more hours per week to see more patients if they could cease this practice.

This survey indicates that physicians, for fear of being sued, are practicing defensive medicine to a great extent. This results in extra costs to patients and to insurance carriers, possible harm to patients, and is a waste of the physician's time.

Today, Florida ranks *third* among all the states in the number of million dollar verdicts and *first* in the average size of jury awards. It's a simple price spiral. The higher the awards, the more people who will hunger after easy riches, and the more attorneys they'll find to represent them. Doesn't that prove that something is wrong in Florida? It isn't the health care system. The quality and advances in medicine in this country are unparalleled anywhere in the world. It isn't the "bad doctor" as some have suggested. Physicians are better educated and trained than ever before.

Those who blame "bad doctors" for the current problem conveniently ignore the rapid rate of increase in frequency of claims. This increase has occurred during a period when the quality of medical care in the United States and Florida has seen dramatic improvement.

According to the Special Advisory Panel appointed by the Governor to study malpractice in New York, the number of "malpractice complaints continue(s) to rise without any necessary relationship to negligent medical care. Our best hospitals and specialists are sued for millions of dollars." The facts are that in Florida it is the best physicians who are getting sued. They are the ones on the leading edge of medical progress, the ones involved in the very risky procedures.

In 1981, 1,718 claims were reported to the Florida Medical Association-sponsored Florida Physicians' Insurance Reciprocal. Of these claims, 55.7% were against Board Certified or Board Eligible physicians, and 70.3% of the claims were against physicians between the ages of 30 to 59. These are clear signs that it is not the "bad doctors" who are getting sued.

This is further substantiated by a report of the Florida Patient's Compensation Fund (PCF). A PCF review of closed claims for the period 1977-1981 indicated that the elimination from the system of physicians with three or more claims would have little effect on the reduction of the number of the claims in Florida.

Moreover, in a recent statement to the Insurance Commissioner's Medical Malpractice Insurance Advisory Council by the President of the Florida State Board of Medical Examiners, Alberto M. Hernandez, M.D., stated that:

> . . . cases of gross or repeated malpractice or substandard medical care represent only a very small percentage of the disciplinary cases brought before the Board. Of the total number of cases considered by the Board, approximately 10% constitute cases of gross or repeated malpractice and substandard medical care. Based on these facts, one cannot say that the bad doctor problem is a contributing factor of any consequence to a medical malpractice crisis in Florida. Neither can it be said that the bad doctor problem has an impact on total malpractice losses in Florida.

It has been suggested that the Department of Professional Regulation, under which the Florida State Board of Medical Examiners functions, is now the strongest professional disciplinary agency in the country. Surely if there was a "bad doctor" problem causing the medical malpractice crisis, this agency would have uncovered the problem or should be removed by the Governor who has the responsibility for the appointments to the Board.

The Florida Legislature first began looking at the medical professional liability problem in 1975. Premiums for professional liability insurance had increased dramatically — as much as 300% in one year. Availability of insurance rapidly diminished as the major carriers withdrew and professional liability protection for Florida physicians became virtually non-existent.

In response to the crisis that existed at that time, the Florida Medical Association, which represents over 14,000 physicians in Florida, created the Florida Physicians' Insurance Reciprocal for providing insurance coverage for Florida physicians. The FMA embarked on a short and long-range program of tort reform designed to bring about permanent stability to the professional liability insurance market in Florida.

The Florida Legislature responded positively in 1975 and 1976, enacting laws designed to deal with the crisis. For a time the situation improved, but unfortunately some of the most effective legislation has been eroded in the courts, declared unconstitutional or has not been applied by the Judiciary.

Since 1976, after the major Tort Reforms were adopted by the Legislature, the frequency of suits has not improved but deteriorated. Suits against physicians have increased from one in ten to one out of every four physicians. The severity (i.e., average cost of claims) has almost quadrupled during the same period of time.

Crisis of affordability • The professional liability crisis we are facing today is one of affordability. It affects the physician, the hospital and, most importantly, the public, who unfortunately must share the burden in paying these increasing professional liability premiums through higher medical costs which are directly attributable to the increase in the cost of professional liability insurance.

Without question, a patient who is injured in the course of health care treatment should be equitably and justly compensated. Unfortunately, in many instances in our current tort system today affecting all civil litigation including medical malpractice, neither justice, equity nor reason prevails and awards are being made for health insurance, disability and life insurance benefits where no negligency exists and for which no one has paid premiums and to pay plaintiffs' attorneys who take 40-50% of the award.

The physicians, the hospitals, and in particular, the citizens of Florida, can no longer tolerate a situation which more and more demonstrates that we are at the point beyond which the costs of determining what happened and who is to blame in tort disputes has far outweighed the benefits for all citizens which flow from that determination. Whether one believes that the balance of goals in the tort system ought to emphasize compensation deterrents, cost efficiency, safety incentives or any other objective, the evidence strongly suggests that the current system is far from the best instrument of social policy and that needed modification must be enacted in order to preserve the system.

Suits against physicians have increased from one in ten to one out of every four physicians.

Resolving the problem • The Florida Medical Association is proposing remedial legislation which is intended to bring about effective and permanent relief for the professional liability problem and related crises. It does not exempt physicians from liability for injury. Rather, it provides for reason and justice in a system gone haywire. The FMA's legislative program is entitled "REASON '83 . . . Defendants' Rights in Civil Actions". It is important to note that the FMA's proposals apply to all civil actions and not just alleged medical malpractice litigation. The FMA feels these proposals represent the best answer for an equitable solution to the current crisis. They are the result of in-depth deliberation and tremendous work over a period of years by numerous individuals including members of the legal and medical profession, respected and learned representatives of the insurance industry and legislative leaders including highly respected individuals who previously served in the Florida Legislature in leadership capacities.

Recommendations to the 1983 Legislature for Defendants' Rights in Civil Actions from the Florida Medical Association, Inc.

Recommendation #1

Mandatory Periodic Payment of All Future Damages (To be Paid as Needed or Earned)

The proposal • This proposal calls for periodic payment of future damages to be paid as needed or earned. It would require that those portions of the award representing future damages after a threshold of $200,000 be paid over the lifetime of the injured party on an as-needed or as-earned basis. In the event of an early death of the injured party, the payment for medical expenses, the cost of care, and

compensation for pain and suffering would cease because they are no longer needed; unexpended funds for paying these expenses would revert to the party paying these expenses. Amounts awarded for future lost earnings would revert to the estate in the event of the death of the injured party. This provision would be applicable to all personal injury cases. The proposal would also provide for structured payment of attorneys' fees.

Structured payout also offers protection to the injured party by preventing squandering of lump sum settlements by guardians or persons ill-equipped to handle such large amounts before the needs of the injured party have been exhausted.

The effect • A survey of the Florida Medical Malpractice Closed Claims Reporting System Study (1975 through 1981) reveals the total payment for future damages in medical malpractice cases, e.g., future wages, future medical and general damages, *account for 68.5% of all damages.* Without a doubt, the ability to structure these payments over a period of time would reduce the total cost to the system. Indeed, a report by the Rand Institute For Civil Justice entitled *The Resolution Of Medical Malpractice Claims,* published by the Rand Corporation in 1982, revealed that periodic payment of future damages in medical malpractice cases appeared to have significantly reduced jury awards and settlements in the states in which they were enacted.

Recommendation #2

Transfer of Punitive Damage Allegations From Civil Litigation Cases to the Criminal Court System

The proposal • Punitive damages should not be allowed in medical malpractice cases. Rather, the medical disciplinary system, hospital licensure statutes and the criminal justice system should be relied on for such punitive action against offending physicians as may be justified. Any damages or fines payable by the physician should go to the state of Florida. The proposal would prohibit allegations from being made against a physician in a civil action. Rather, anyone having knowledge that a physician may have acted out of malice or willfully, wantonly, recklessly or with conscious disregard or indifference toward the interest of others would be required to report such conduct to the Department of Professional Regulation. After investigation, pursuant to the authority of the Department, the Department would, if it found probable cause to believe the allegations were true, transfer the information obtained from the investigation to the appropriate State Attorney for review and possible prosecution. This would not prohibit the Department from continuing to conduct its own disciplinary proceedings.

The effect • This proposal would remove punitive damage allegations from the civil system and place them in an appropriate system where the allegations can be reviewed and action taken against the offending physician as may be justified. Removing these allegations from the civil case will limit that case to being tried on the merits of the standard of care issues and thus remove from that class of cases that are now being settled, those that are being settled simply out of fear of allegations of punitive damages which are uninsurable.

Recommendation #3

Removal of Joint and Several Liability in Personal Injury Cases

The proposal • This proposal would provide that each defendant be responsible only for that portion of the award corresponding to the percentage of responsibility that has been assigned to him by the jury, or the court in the absence of a jury. This proposal would be applicable in all personal injury cases.

The effect • Under this rule, each defendant held in any degree of liability would be responsible only for the percentage of liability assigned to him by the jury or the court, in the absence of a jury. This concept would no doubt make those physicians or others who are uninsured or underinsured, review their situation relative to how they might be affected if they are required to pay a large percentage of a damage award. This effect would balance any concern for no longer permitting the plaintiff to collect the entire amount of his damages against any one of a number of liable defendants regardless of the percentage of liability.

Recommendation #4

Limitation of Attorneys' Fees Pursuant to a Schedule Based on the Amount of Recovery in Civil Litigation (Contingency Fees)

The proposal • This is a recommendation that in all personal injury cases there be percentage limitations on contingency fees which attorneys can receive from either a court award or a settlement. The FMA proposal would adopt the current New Jersey schedule for contingency fees which imposes the following limitations:

— 50% on the first $1,000 recovered;
— 40% on the next $2,000 recovered;
— 33⅓% on the next $47,000 recovered;
— 25% on the next $50,000 recovered;
— 20% on the next $150,000 recovered;
— 10% on any amount recovered over $250,000; and

— Where the amount is for the benefit of a client who was an infant or incompetent when the contingent fee arrangement was made and the matter was settled without trial, the foregoing limits shall apply except that the fee on any amount recovered up to $50,000 shall not exceed 25%.

The effect • The case for reasonable limitations on contingency fees is strong. First, such a schedule would serve a social function in that the plaintiff would receive the bulk of the money awarded in a personal injury action. The attorney should not be able to receive a windfall if a severely injured individual walks into his office. In the $12,470,000 case in Broward County, the attorney who received $4,400,000 would have been cut to about $1,200,000 had the above limitations been in effect. Attorneys' fees should be related more to the legal work and the expense involved in handling the case and less to the futurity of the plaintiff's economic status and degree of injury.

The Rand Corporation Institute For Civil Justice report entitled *The Resolution of Medical Malpractice Claims* published in 1982, revealed that an imposition of limits on contingent fees charged by plaintiffs' attorneys seemed to cut the average settlement by 9%; raise the portion of cases dropped by 6% and reduce the share of cases going to verdict from 6.1% to 4.6%.

Recommendation #5

Mandatory Limitation on Recovery of Damages for Pain and Suffering and Other Non-Economic Losses

The proposal • This proposal provides for a statutory limit of $250,000 be placed on the amount of general or intangible damages that can be awarded in any given case. There is ample precedent for setting dollar limits on recovery for injuries. That is the basis of Workers' Compensation awards. This proposal would be applicable to all personal injury cases.

The effect • Such a ceiling would help establish a uniformity and logic to the awarding of general damages, isolating them from the emotional considerations that have resulted in wide disparity in awards. Perhaps even more important it would encourage defense attorneys and insurance companies to fight marginal cases they now settle prematurely out of fear of astronomical awards. The cost savings of a cap on general damages have been reviewed by the Rand Corporation Institute for Civil Justice in its report entitled *The Resolution of Medical Malpractice Claims*, published in 1982. The report concludes that when a state moved to cap damages the effect was to reduce verdicts by 30%, cut the average settlement by 25%, and reduce the share of cases going to verdict from 5.1% to 4.6%. In a separate study conducted by Peat, Marwick and Mitchell, on behalf of the Pennsylvania Emergency Task Force to examine medical liability insurance, PMM Company "costed out" the potential savings from some of certain legislative proposals. Included was a review of the proposal to limit general damages to $250,000. They found this proposal to have a potential savings of 6 to 11% on the cost of liability insurance in Pennsylvania.

Recommendation #6

Establishment of a Statutory Provision Regarding the Application of Summary Judgment Procedure in all Civil Cases

The proposal • This proposes the establishment of a statutory standard regarding the application of summary judgment procedure in all civil cases.

The effect • This statute will allow Circuit Courts to dispose of nonmeritorious and frivolous cases when no dispute exists concerning material facts. Florida Courts have followed a very restrictive interpretation of summary judgments, thus adding significant costs to the defense of liability actions.

Recommendation #7

Remittitur-Additur

The proposal • The current statute provides that the court shall review in a medical malpractice case the amount of an award to determine "if such amount is *clearly* excessive or inadequate in light of the facts and circumstances which were presented to the trier of fact".

The existing statute relative to remittitur-additur should be strengthened to require courts to use this concept when it is apparent that an award is simply excessive or inadequate. The statute should be amended to strike the word "clearly" and other language in the statute that is not relative to making a determination of excessiveness.

The effect • With the statute amended, it is felt that courts will be more likely to reduce grossly excessive awards that have no relation to the damages or evidence presented.

ADDENDUM: Quotations from the 1982 editions of Florida newspapers dealing with the medical malpractice crisis in Florida

In 1981, insurance companies that covered Florida physicians doled out more than $25 million to patients who sued doctors and hospitals for malpractice. This year, a Broward jury has already awarded half that much to a single patient. *The Fort Lauderdale News*, June 13, 1982, (referring to the March 26 jury verdict for Susan Ann Von Stetina against The Lauderdale Lakes Hospital).

It was the largest malpractice judgement — and the largest attorney's contingency fee in such a case — in U.S. history. *Miami Herald*, June 16, 1982. (Reporting on a $12 million jury verdict for Susan Von Stetina and the $4.4 million fee a Broward judge ordered paid to her attorney, Sheldon Schlesinger, in a malpractice suit against a Broward hospital).

Schlesinger could earn as much as $10.64 million as the law does not prevent him from taking both the $5.23 million contingency fee in addition to the judge's ($4.4 million) award (which is on appeal). *The Miami Herald*, September 28, 1982.

No one advocates the abolition of the contingency-fee system, which does allow the non-rich to obtain the best legal talent. The proposal is to put a reasonable limit on the attorneys fee so that more premium dollars can be used to compensate injured patients rather than make their attorneys millionaires. (Robert L. Atkins, Administrator for two physician-owned, self-insured trusts in Florida that manage mainly malpractice claims.) *Tallahassee Democrat*, June 14, 1982.

According to Jury Verdict Research, an Ohio Company that studies jury awards, Florida malpractice awards are the highest in the nation, 25 percent above the national average. *The Miami Herald*, June 15, 1982.

Patients are increasingly litigation prone. One in four Florida doctors will be sued this year. Everybody wants to sue. And people think the insurance companies will pay. Ultimately, however, consumers pay for higher medical costs. (Allen Shiver, General Manager of the Florida Medical Malpractice Joint Underwriting Association.) *Cocoa Today*, August 8, 1982. Associated Press Story.

"The Florida Board of Medical Examiners won't hesitate to revoke a doctor's license if it's necessary," Buddy Shorestein, secretary of the Department of Professional Regulation, said. Indeed, license revocations have increased since the medical board was reorganized in 1979. In fiscal year 1977-78, the state lifted only one doctor's license. By 1980-81, the number of revocations had risen to seven. *The Sarasota Herald-Tribune*, August 12, 1982.

America is in danger of being overrun by hordes of lawyers hungry as locusts. (Warren Burger, Chief Justice of the U.S. Supreme Court, as quoted by columnist Charles Whited), *Miami Herald*, June 1982.

We have more lawyers in the telephone book than we have Garcias. And Dade County has a lot of Garcias. How do all of those lawyers eat. Well, they are aided by the fact that South Florida has a greedy, aggressive population and is one of the most lawsuit-crazy places on earth. (Columnist, Charles Whited), *Miami Herald*, June 1982.

We are the only nation in the world that has more lawyers than doctors. Malpractice suits have become a most lucrative market for them. Some trial association lawyers have had seminars on how to sue doctors. The malpractice plague is spreading. (Dr. Edward R. Annis of Miami Shores, former president of the American Medical Association) *Florida Times-Union*, October 6, 1982.

I was advised (by two attorneys) to look to the insurance industry and inquire as to where their (doctors') insurance premium is going. I did this and discovered that my premium dollar is spent as follows: Legal services: 50 cents; insurance costs: 28 cents; patient awards: 22 cents. The defense rests. (Dr. Robert H. Lester), *Florida Times-Union*, November 17, 1982.

Defensive medicine (practiced because of the large number of malpractice suits) probably adds as much as 10 percent to the cost of the average hospital bill. (Stanley S. Goldman, M.D., President-Elect, Broward County Medical Association), *The Miami Herald*, May 20, 1982.

Defense against malpractice suits has become more of a business transaction than a situation where justice is necessarily carried out. An insurance firm is not worried about saving my reputation. They're worried about protecting their dollars. Why spend $23,000 to defend a suit when they can settle out of court for $5,000, even if the doctor is not at fault. (Dr. Fenton Bennett, Pasco County gynecologist), *The Tampa Tribune*, August 9, 1982.

The practice of defensive medicine has become commonplace (because of spiraling malpractice premiums and whopping malpractice claims). Patients not only pay for the unnecessary tests prescribed by malpractice-shy doctors but also must foot the bill for medical costs inflated by rising insurance premiums. The tragedy in all this is that because of the malpractice problem, the relationship between the patient and the physician has changed. (Dr. Lee Dockery, President-Elect of The Florida Medical Association and Associate Dean of the University of Florida College of Medicine), *The Gainesville Sun*, December 19, 1982.

There is mentality in the population that for every harm there must be a remedy of money. A significant part of the population is hoping to fall down in the supermarket and retire with a crippling injury. [Thomas McNamara, American Bar Association official] *St. Petersburg Times*, January 2, 1983.

The number of malpractice suits filed in Florida has more than doubled in the past six years to 1,972 suits in 1981. *Associated Press*, June 15, 1982.

Pensacola physicians are likely to face the same burgeoning medical malpractice insurance costs that brought South Florida's surgery slowdown, doctors here say. Unless Florida lawmakers provide relief, the Panhandle can expect to see malpractice insurance rates jump within the next year. It will be the patient who winds up paying the increase. [Dr. Larry J. Sauls, chairman of the Escambia County Medical Society's malpractice committee.] *The Pensacola News*, June 16, 1982.

We should care because excessive awards to lawyers and plaintiffs in Malpractice cases help drive up the cost of liability insurance for doctors and hospitals, and that cost eventually will show up in the patient's bill. The steadily rising cost of such insurance is already a matter of serious concern to doctors, hospitals and state legislators. *The Tampa Tribune*, September 12, 1982.

Gunter [Insurance Commissioner Bill Gunter] blamed the high [malpractice insurance] rates on multi-million dollar jury awards to the victims of medical negligence. Doctors and hospitals claim they can't afford to pay these rates. Many physicians, particularly in South Florida, say they will be forced to either go without malpractice insurance or to avoid high-risk medical specialties. "The ultimate victim," Gunter said at a news conference, "is the consumer who the high cost of malpractice insurance is passed on to." *The Miami Herald*, June 4, 1982.

Medical malpractice claims frequency, severity and causes

James W. Walker, M.D.

For several years, we have reported in *The Journal of the Florida Medical Association, Inc.* the ten leading causes of medical malpractice claims which have been reported from FMA-sponsored plans for the years 1963 through the year just completed. The data base includes 13,808 closed claims which represent a pay out of $220,186,971. The claims have been classified in 21 categories. This report will list the ten leading causes of malpractice claims as to frequency and severity with a comment as to the cost.

The data used in this report will be limited to the years 1976 through 1982 because this represents current data. The data obtained for the period 1963 through 1975 (Employers' and Argonaut Companies) has been eliminated because data from early years tends to dilute the significance of the developments of recent years. The current data consists of 8,061 closed claims and represents a pay out of $140,263,069.

Frequency • There were no changes noted during the year among the first four causes of malpractice claims as to frequency. Injury to a child in childbirth, which was number eight in 1979, has advanced one position each year since that time and is now number five. We have noted the sharp increase in this category since the Mediation Panels were declared unconstitutional in February 1980. Infection of the surgical site has advanced from number seven to its current position of number six. Improper anesthesia, which was number five in frequency at the end of 1981, is now number seven. Foreign bodies left in patient during surgery maintains its position at number eight. There has been a change in the number nine and ten categories with employee error advancing to number nine and injury from falls (during examination or while under a doctor's care) is now number ten.

Severity • The trend, as reported for the past four years as to the awards in cases resulting from childbirth, continues. Injury to a child in childbirth, which was number three at the end of 1980 and number one at the end of 1981, continues to rank number one at the end of 1982. Improper anesthesia has displaced injury to a mother in childbirth in the current study. This is probably because of the use of more recent data as previously explained. Actually, it is our impression that losses from anesthesia have improved during the past two years as a result of a very energetic loss prevention program sponsored by the anesthesiologists. Error of an employee, which was number six at the end of 1981, is now number four, with abandonment displaced to number five. Improper diagnosis (not involving surgery) is now number six. Patient dissatisfied with results and burns from equipment (including radiation) now appear among the top ten causes as to severity. Adverse reaction to drugs and assault (generally, operating without prior permission) have disappeared from this list. It is our opinion that this is due to the increase in loss prevention activity which we have witnessed throughout our State since mid-1979.

Cost (Frequency x Severity) • This study has not been previously reported, and the five leading causes as to the cost of medical malpractice claims in the current series is shown. This is perhaps the most important part of this new study in that it represents 77 percent of all the losses in this series. Adverse reaction to drugs, while not considered a costly item per claim, appears on this list because of the high frequency of such claims.

The Professional Insurance Management Company (PIMCO), on behalf of the Florida Physicians' Insurance Reciprocal, will continue the medical malpractice prevention program throughout Florida during 1983. To date, some 8,600 Florida physicians have attended these three-hour seminars. Physician awareness as to the causes and prevention of medical malpractice claims will ultimately affect the premiums each of us must pay for our professional liability insurance.

The Author
JAMES W. WALKER, M.D.
Dr. Walker is President of PIMCO.

Ten Leading Malpractice Causes
(FMA's Sponsored Plans 1976-1982)

Frequency

1. Improper Diagnosis (not involving surgery)
2. Technical Surgical Error
3. Adverse Reaction to Drugs
4. Improper Treatment of Fractures
5. Injury to a Child in Childbirth
6. Infection of Surgical Site
7. Improper Anesthesia
8. Foreign Body Left in Patient During Surgery
9. Error of an Employee
10. Injury from Falls (during examination or while under doctor's care)

Severity

1. Injury to a Child in Childbirth
2. Improper Anesthesia
3. Injury to a Mother in Childbirth
4. Error of Employee
5. Abandonment
6. Improper Diagnosis (not involving surgery)
7. Infection of Surgical Site
8. Technical Surgical Error
9. Patient dissatisfied with results
10. Burns from Equipment (including radiation)

Cost (Frequency x Severity)

1. Improper Diagnosis (not involving surgery)
2. Technical Surgical Error
3. Injury to a Child in Childbirth
4. Improper Anesthesia
5. Adverse Reaction to Drugs

● Dr. Walker, P.O. Box 40198, Jacksonville 32203.

Medicine today and tomorrow

Edward R. Annis, M.D.

If the title had included medicine yesterday as well as today and tomorrow, I could have told you about a different kind of medical practice and a different kind of doctor than those who are practicing today. There are thousands of doctors practicing and bringing many of the marvelous advances of today in areas where no such knowledge existed just a few years ago. Comparing medicine today with even 25 years ago would be like comparing a 747 with the plane that the Wright brothers flew in Dayton.

If after this meeting you were to accompany a doctor friend to any of your major hospitals and visit the emergency room, the surgical operating suite, the cardiac intensive care units, the path lab, the x-ray lab, the nuclear lab, then visit the oncology center for the medical management of cancer, you would see some of the truly marvelous diagnostic and therapeutic tools which we have in use today. And as you left the hospital, I am sure you would be surprised to know that more than 75% of everything shown today did not exist when I last spoke to this Rotary Club 20 years ago.

With all of this advancement there has also been a great escalation in health care costs. No one is more concerned than your doctors and the hospital administrators of this nation. There are many contributing factors and many over which neither doctors nor hospitals have any control. Neither are there any ready or simple solutions to this obviously multifaceted problem.

Inflation • A repeated criticism states that health care costs have doubled over the past decade, and that's true. A major contributing factor, however, constituting at least 50% of that increase in costs derives from the same inflation that effects all of you in your business and personal affairs. Our government has consistently spent more than it has taken in by borrowing money and while medical costs have doubled in the past decade, major government costs have multiplied four and five times to feed the fires of inflation. As an example, entitlement programs in 1972 totaled $86.7 billion, whereas in 1982 they went up not twice as much but four and a half times as much to more than $375 billion. In 1972, the interest on the national debt was $19.7 billion. This year it will approach five times as much, or $100 billion, reflecting an interest on the national debt totaling almost $2 billion a week.

Our hospitals are labor intensive; from 55% to 65% of all monies paid to hospitals goes for the people who work there — the plumbers, the electricians, the maintenance people, the food handlers — before we ever get to the technicians and nurses without whom we couldn't provide the quality of care available today.

There is no way we can take care of two million more people this year than last and not have it cost more money.

Regulations constitute a story in and of themselves. Starting in New York, but duplicated in other states, are documented records indicating that some 25% of the increase in health care costs over the past 15 years can be attributed to regulatory demands of personnel and details which have nothing to do with improving the health care we bring to the people of this country. Thus, inflation and regulations taken together contribute roughly 75% to this increased cost, factors over which neither doctors nor hospitals have any control.

What about the other 25%? I believe we can justify increases in this area. In the first place, there are two million more people in the country today than there were a year ago today. This reflects a normal increase of births over deaths and legal immigration. There is no way that we can take care of two million more people this year than last year and not have it cost more money. These figures do not count the six to nine million illegals who are in this country, according to our government, all of whom come under the health care system and must be cared for.

The Author
EDWARD R. ANNIS, M.D.
Dr. Annis is Chairman of the FMA Speakers Bureau and a past president of the American Medical Association. The text of this article was presented in a speech to the Rotary Club of Jacksonville on January 24, 1983.

Another part of the acceptable 25% is shown by the great technological advances which make it possible for people to live who used to die, for those who were blind who now see, and for those who were deaf who now hear. Year in and year out for the past ten to twelve years we have lowered the mortality from heart attacks and stroke and the current rate of reduction runs around three percent per year in lowering deaths due to heart attacks and five percent per year on deaths due to strokes.

. . . why is 9½% or 10% for total health care to be decried yet 17½% on sports and recreation totally acceptable?

The third factor in the acceptable 25% is recognition of the fact that only 11% of the population are over the age of 65, but they consume 35% of the health care dollar. Here in Florida, the average number of senior citizens over 65 approximates 19%, and we have three counties where the percentage exceeds 30%. When you realize that Medicare limits some hospital expenses which may be billed and then pays only 80% of the allowed billing, it is easy to understand why hospitals are paid only roughly 60% to 65% of their true cost. The balance of these costs is a hidden tax, a sick tax, passed on to those who buy insurance for themselves, for their families or for their employees, thus escalating the cost to be absorbed by the private sector. Several studies have shown that of this one third of all the money spent on health care among the elderly, 40% of it is spent during the last year of their lives. Some prolonging of life when the quality of life is in doubt may be questioned, but humane demands, legal demands, and the demands of families require doctors to do everything they can do to protect and prolong life.

Percentages • Repeatedly we read that medical care has reached 9½% of the gross national product and will soon reach 10%. Is it unreasonable to ask, "How much should it cost?" If we are considering percentages, it is well to recall that in 1979 our government reported that 17½% of the gross national product was spent on sports and recreation. I realize that sports and recreation are contributors to good health and one might even include them as a part of the overall contributions to preventive medicine, but why is 9½% or 10% for total health care to be decried yet 17½% on sports and recreation totally acceptable? Remember, too, that 9½% or 10% for total health care includes not only the 19¢ out of a dollar to the doctors and another 40¢ to the hospitals, but the remaining 40¢ to the 7,000 nursing homes, research centers, transportation facilities, etc. — all included under the broad label of total health care.

In 1980, the Department of Commerce reported that 20% of the gross national product was spent on transportation of people and things from one place to another. Ours is a mobile nation and transportation is essential, but the health of the people is basic and fundamental, and if 20% is an acceptable figure for transportation costs, can we not justify half as much a percentage of the gross national product for the total health care of the people?

If someone were to announce to the Jacksonville media that a new factory was to be built in Jacksonville which would employ hundreds of people with a large annual payroll, it would be greeted with acclaim as a stimulus to the local economy, a stimulus which would create jobs and purchasing power for the goods and services provided here in Jacksonville. I suggest to you that your hospitals constitute some of the greatest contributors to the economic stability of this or any other city in that they operate 365 days a year, 24 hours a day, labor intensive, providing their employees with continuing income used to provide goods and services for them and their families. Money spent on health care is not money lost, money wasted, or money down the drain. On the contrary, health care workers are tremendous contributors to a steady economy.

Malpractice problem • We have another great and growing, serious problem at the moment; one that we hope will get the attention of all of our citizens. That is the abuse in many instances of our legal processes in the area of alleged malpractice. The Florida Medical Association has records going back over a period of 20 years reflecting every allegation of malpractice against any of our physicians. We know that the records will show that in some 35% to 40% of those cases something happened because a doctor did something that he should not have, or failed to do something that he should have. When accidents occur, they should be recognized and those injured should be compensated to the extent of their need as long as there is need.

There is no effort on the part of the profession to absolve anyone from responsibility or taking care of someone who is injured because of the shortcomings of a member of the profession. Our big concern is, however, with the other 60% unrelated to the medical result; it is in many of these cases where no malpractice exists. Neighborly, compassionate jurors may feel sympathy for the injured, paralyzed, or brain-damaged, and — devoid of an understanding of either medicine or law — provide ever-increasing and costly awards. The cost of medical liability insurance has risen to levels which many physicians and surgeons find intolerable. It is the public which ultimately pays these costs in ever-increasing doctor and hospital bills.

We believe that when they understand the problem, our public will agree that there is something wrong with the system that frequently gives more money to an attorney than it does to an injured party. We believe they will agree that there is something wrong with the system that recently awarded an attorney more than $14,000 a day for a whole year assuming that he worked ten hours a day for six days a week for fifty weeks. The University Health Trust at Jackson Memorial Hospital in Miami reported that between 60% and 70% of all monies paid out (or two out of every three dollars) for liability went to attorneys.

We believe that when they understand the problem, our public will agree that there is something wrong with the system that frequently gives more to an attorney than it does to an injured party.

The public via their elected representatives has agreed to reasonable limits of compensation for injured workers, for injured members of the military, and the courts have repeatedly upheld laws limiting compensation to victims of nuclear accidents. Reason and justice demand some limitations on such nebulous claims as pain and suffering, loss of consortium, etc. which have contributed to ever higher awards. Lawmakers in New York, New Jersey, California and Indiana, — to mention only four states — have seen fit to put some limitations on lawyers' contingency fees and on the nebulous non-economic losses associated with injury.

From 1975 to 1980, we had mediation panels consisting of a physician and two attorneys, one of them a judge. During those five years no one could bring an alleged malpractice suit against a physician before first submitting the complaint to the mediation panel. During that period where obvious error had occurred, it was recognized and the individual compensated. In the 60% rarely associated with questionable negligence, however, the mediation panel absolved the physician 93% of the time, and in 80% of the cases the decision was unanimous. Those mediation panels were comprised of physicians and attorneys who understood both medicine and law, but they were ruled unconstitutional in February 1980. Since that time, malpractice premiums have risen more than 80% and energetic trial lawyers have taken advantage of a litigious climate so that this year one in four of Florida doctors can expect to have an allegation of malpractice levied against them.

Total health care costs • Is it not reasonable to ask "Where does all this money go?" The leading cause of death in this country is cardiorenal vascular disease, but that is not the greatest drain on the health care dollar, cancer is. Though cancer occurs at any age, it is predominantly a disease of later years. Repeated observers have estimated that we could eliminate 35% of all cancers afflicting the human body today if we could eliminate one product — namely, tobacco. A recent Harvard health care letter pointed out the tremendous cost of this one product, known for its contributions to cancer of the tongue, the floor of the mouth, the trachea, the esophagus, the lungs and the bladder.

Recently, we read where six or seven people were killed when a madman put cyanide in bottles of medicine. The media reacted quickly, the government reacted quickly, and in uncharacteristic speed legislation was passed mandating tamper-resistant packaging for drug products. This was tragic, of course, but nowhere near as tragic nor as costly as the second greatest drain on the health care dollar, namely accidents. In the same week of the Tylenol tragedies, 900 people were killed on our highways and 66,000 more were put in hospitals as a result of automobile accidents. Many of these injuries were serious, requiring prolonged hospitalization and the multiple skills of the neurosurgeon, the chest surgeon, the abdominal surgeon, the orthopedic surgeon and many others.

Imagine the tragedy of 10,000 young people made quadriplegics or paraplegics every year as a result of automobile accidents. These young people will become dependent upon the medical establishment as long as they live and at great and continuing cost. There are two million burns a year, half of these in children, most of them in their own homes, with some ten to twelve thousand deaths.

We hear about marijuana, cocaine, heroin, but the number one drug that causes more trouble than all the others put together is alcohol. Nothing else even comes close when you combine the abuse of alcohol with the fast moving automobiles that account for the over eight thousand deaths in our young people today in addition to another 65,000 serious injuries that will paralyze them or maim them in one way or another for months or sometimes for life.

A couple of years ago at the University of Virginia, a survey was run to determine how much it cost to take care of victims of gunshot wounds and how many of them pay their bills. It was found that only about five percent ever pay their bills and that the average cost is $50,000 per case. Admittedly, some of them did not cost that much because the gunhandlers were better shots and they died that day; but others — as a result of shots through the abdomen, the liver, the heart, the lungs — required many talents to save their lives and put them back together again.

Neither doctors nor hospitals are responsible for the increasing number of cancers, of accidents, of burns, of gunshot wounds, but they are repeatedly called upon to use the best of knowledge and facilities to assure the best of medical care. We feel that it is our duty to provide the average citizen of this nation with all the medical care they need, when they need it, as long as they need it, whether or not they can afford to pay for it. We feel that the great majority of our people who are employed, through the mechanism of the great insurance industry, can provide for themselves and their families and that those unable to provide for themselves are the just responsibility of government. I have tried to emphasize many of these costly contributors to health care so that you will be wary of those who have simple solutions to such obviously complex problems.

Alternatives • Time does not allow me to talk about many of the things that you and I can do to cut down on the excessive use and abuse of our hospitals and of our medical system. It has been estimated that from 60% to 80% of visits to emergency rooms are not emergencies and that they cost much more than the visits which could have been made to a personal physician. Much, too, can be said for preventive medicine, but here again the number one contributor to preventive medicine will not be doctors or hospitals, but rather educated and motivated people who don't smoke, use alcohol only in moderation, who avoid excessive weight and who exercise with some degree of regularity.

Money spent on health care is not money lost, money wasted, or money down the drain.

If, however, we are unsuccessful in getting the whole story told and if political action mandates a limit on what hospitals and physicians will be paid, we must of necessity live with it in our democratic society. If forced, we can do it in one of three ways:

(1) We can deny care. This is what is being done in other countries, such as England, where if you are over the age of 55 the national health service will no longer take care of your end-stage renal disease by use of the artificial kidney or kidney transplant. These services can still be obtained in the private sector, but not under the national health system, because those who control the budget have set the cut-off age at 55. In both England and Sweden today, if you are in your mid-sixties and have a heart attack, no longer are you admitted under the national health system into the cardiac care unit. They treat you as we did some years ago; but you are denied the benefit of the great advances in cardiology today. Such denial of care, of course, can save money.

(2) The second way to live within mandated cost limitations is to delay care. Many of you may have read the recent newspaper reports following the strike of hospital workers in London when the national health service reported that the waiting list for elective surgical procedures had expanded to 810,000 people — a waiting list that could take from six months to six years. Refusing to take care of any more than a certain number of procedures in any one month or any one year, and putting the rest on a waiting list, is obviously a way to save money.

(3) The third way, of course, is by giving less than the best care of which we are capable.

And so, if mandated by law, your doctors and nospitals will have to abide by the decision to limit their costs, but they will have to do it in one of these three ways, either by denying care to many, by delaying care to many more, or by giving less than the best of care to most. I doubt if any of us want that solution.

Medicine tomorrow, in my opinion, will continue to advance as has medicine yesterday and today. From our laboratories of science, biology, botany, chemistry, physics and nuclear physics are coming tremendous contributions giving us even better tools to make it possible for you and your loved ones to live long, to live well, and to enjoy life. Be suspicious of those who have simple solutions for complex problems and of those who look only at a price tag at how much something costs rather than how much it is really worth.

● Dr. Annis, 9999 Northeast 2nd Avenue, Suite 303, Miami Shores 33138.

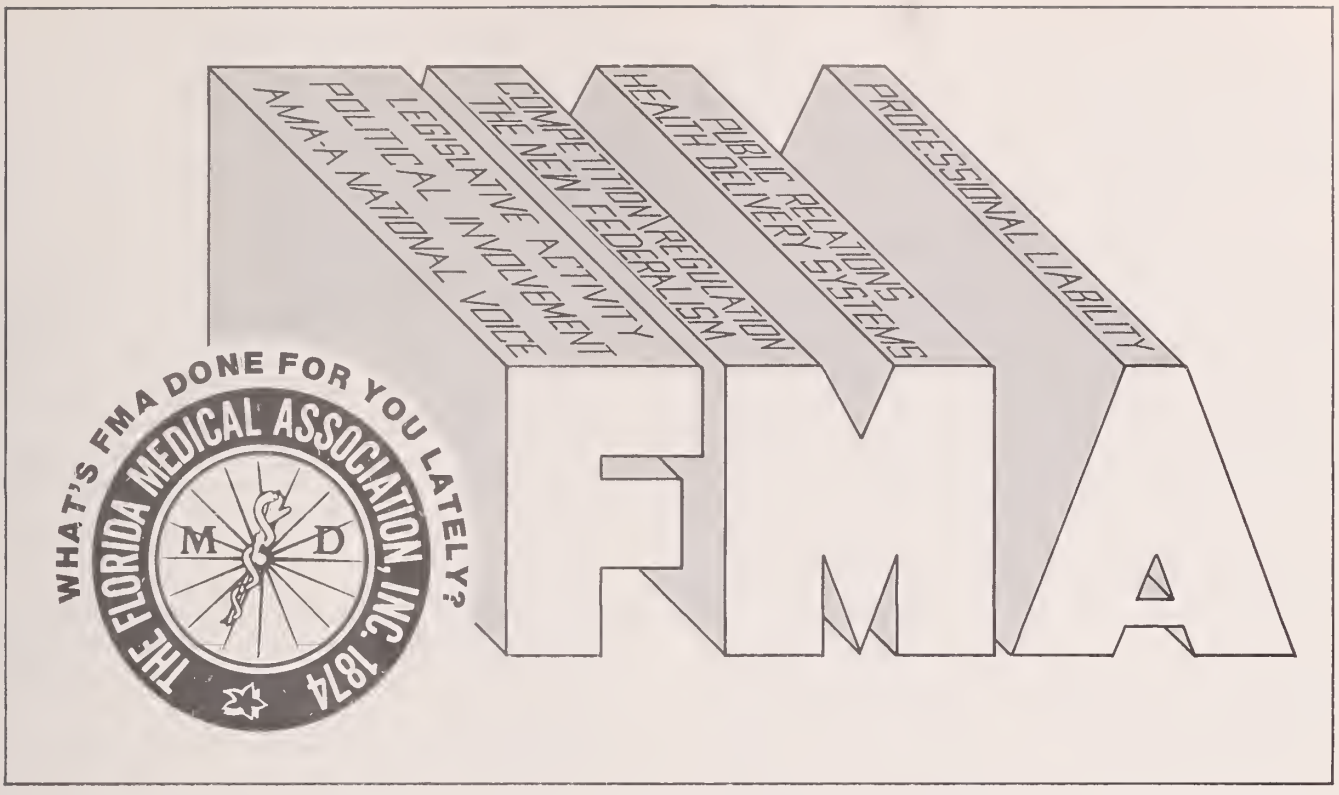


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Summary
FMA Leadership Conference
January 29-30, 1983
"What's FMA Done for You Lately?"

Highlights ●

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The 1983 Florida Medical Association Leadership Conference was conducted Saturday and Sunday, January 29-30, 1983, at the Contemporary Resort Hotel, Walt Disney World. "What's FMA Done for You Lately?" was the theme of this year's Conference, whose purpose was to provide county medical society leaders and others with an indepth and timely look at the professional liability crisis and other important issues of concern to medicine.

Registered attendance totaled 177 physicians, Auxiliary members and other guests. Physician registrants represented 32 county medical societies or about 98% of the total FMA membership and seven FMA-recognized specialty groups.

The following are highlights of the major topics discussed and debated at the Conference.

FMA President Robert E. Windom, M.D., of Sarasota, opened the Conference and presided at the Saturday morning session. He reviewed for the assembly progress made to date toward resolving the professional liability insurance crisis in Florida and toward discharging other FMA priorities.

The President invoked his "House of Medicine" analogy in appealing for further increases in American Medical Association membership in Florida. Dr. Windom thinks of the federation of medicine as resembling a house, with the foundation representing county medical societies, the walls symbolic of the Florida Medical Association, and the roof being the AMA.

The roof is not as strong as it should be, he said, because only 70% of FMA members belong to the AMA.

Even so, Florida AMA membership has increased sufficiently in the past year to give Florida three additional AMA delegates, for a total of 11. This makes Florida's AMA delegation the sixth largest.

He observed that FMA's 1983 legislative efforts are being finalized, particularly with regard to the seven-point tort reform proposals. At the county medical society level, key contact physicians are now interviewing members of the State Legislature to determine their attitudes, and hopefully to win their support for the program.

In the medical service area, Dr. Windom advised that FMA will soon recommend a five-year emergency medical services program to the Florida Department of Health and Rehabilitative Services.

The public image projected by medicine is a matter of concern, he said. Surveys indicate that a significant percentage of the public are losing faith with medicine and most people think their doctors do not spend enough time with them.

He advised that the failure of Congress to curb the Federal Trade Commission's regulatory authority over the licensed professions during the lame duck session last December was a disappointment and there is concern about the incessant attempts to implement unproven programs and regulations that adversely effect physicians and the continuing quality of health care.

At the conclusion of his remarks, Dr. Windom introduced the next speaker, FMA Past President T. Byron Thames, M.D., of Orlando, Chairman of the FMA Committee on Professional Liability and one of three physician members of the State Insurance Commissioner's Medical Malpractice Task Force.

The first part of Dr. Thames' presentation was a showing of the FMA slide/sound presentation, "With Reason and Justice." This 20-minute program is narrated by Edward R. Annis, M.D., Chairman of the FMA Speakers Bureau. It presents startling but pertinent facts and statistics to establish the reality of the professional liability crisis in Florida, and summarizes the corrective action proposed by FMA, including seven bills to be presented to the 1983 Florida Legislature, as well as various recommendations to the Florida Supreme Court and proposed constitutional amendments.

The Task Force of which Dr. Thames is a member met for 25 days over the past six months before making public recently its recommendations to the Legislature. Dr. Thames surmised that efforts will be made to represent the recommendations as a "bipartisan approach", but he cautioned, "I would submit that this is not going to be your perspective nor is it mine."

Some of the Task Force's major proposals are:

- Repeal of Chapter 768.50, Florida Statutes, which allows the prevailing party in a malpractice suit to recover attorney fees from the losing party. Dr. Thames observed that the Florida Physicians' Insurance Reciprocal wins upwards of 85% of its cases that go to trial.
- Bifurcated trial which provides for two separate proceedings before the same jury to determine first liability, then the damage award. This would tend to shorten some cases but lengthen others.
- Structured settlements if the award amounts to $250,000 in general damages or $1 million total damages.
- Restriction of pleading to punitive damages.
- Partial New Jersey Plan, including among other things a requirement that 90-day notice be given of intent to file suit. This would allow time for peer review by insurance companies and for negotiated settlement, if indicated. Also provided is an arbitration system in which each side would select one arbiter and the two chosen arbiters would choose the third.
- Tightening of requirements regarding the use of expert witnesses.
- Requirement that the Insurance Commissioner report to the Florida Board of Medical Examiners the names of physicians who lose two malpractice cases.
- Strengthening of immunity of medical review committees.

Dr. Thames dwelled at some length on one other proposal, which relates to the existing Patients Compensation Fund. The financially ailing PCF, which currently covers about 3,500 physicians in Florida, pays judgements in excess of $100,000. The Task Force, Dr. Thames said, wants to maintain the PCF with actuarily sound rates and limits on its liability. The Task Force further suggested that what Dr. Thames termed "deep pockets" be tapped to raise a $25 million PCF escrow account to handle mammoth awards. This fund would be raised through an additional license fee of $100 per year on all Florida physicians whether they participate in PCF or not; and a charge against each hospital of $5 per bed per year. If this fails to maintain the $25 million balance, hospitals would have to impose a daily bed tax. Participants could be assessed only 33% of the annual premium.

Dr. Thames recalled that he and his two fellow physicians on the Task Force were unsuccessful in getting a cap placed on general damages. They were voted down each time as they proposed limitations of $250,000, $500,000 and $1 million.

Even the FMA legislative program will not provide immediate relief, Dr. Thames advised. "If we pass everything FMA wants today, it will not affect premiums for three or four years," he explained.

Although the FMA and the Florida Academy of Trial Lawyers are completely at odds over the professional liability issue, Dr. Thames believes it is in FMA's best interest to maintain an open dialogue with them.

Dr. Thames emphasized the importance of every FMA member getting actively involved in the professional liability effort. He said the $50 per member mandatory assessment was implemented last fall by the Board of Governors with the authorization of the House of Delegates to help finance professional liability reform. Only 55% of the membership has paid the assessment to date.

The next speaker was Vernon B. Astler, M.D., of Boynton Beach, also a Past President of FMA and now Chairman of the Board of the Florida Physicians' Insurance Reciprocal.

Dr. Astler began his talk with comments about property and casualty insurance in general. Many companies in the field have refused to increase premiums to appropriate levels, he said, and "they are running on borrowed time with inadequate premiums."

He believes that generally large companies will survive, those of medium size will merge, and the smallest ones will go broke. He diagnosed medical malpractice as "more acutely ill" than other forms of insurance.

The FMA- sponsored Florida Physicians' Insurance Reciprocal from the beginning did well until "the tragic loss of mediation panels" in 1980, he said. Since the Supreme Court of Florida declared these panels to be unconstitutional, the FPIR has had to increase its premium rates in successive years by 26%, 30% and 27½%. He contrasted this with New Jersey, which has mediation panels and limits on contingency fees and where the physician-owned liability insurance company has imposed only two modest premium increases in the last eight years.

In California, the rate structure is higher than in Florida, but cases are backlogged in the courts by five years.

Dr. Astler stated that the Reciprocal Board is "totally supportive" of the FMA tort reform proposals.

About 1,800 physicians have left the FMA/FPIR program, tempted by the "temporary financial carrot" offered by commercial insurors who are now back in the malpractice business in Florida.

Dr. Astler suspects that multi-million-dollar malpractice verdicts cause publicity that stimulates even more lawsuits. Instead of one in four, one in 3.6 physicians can expect to be sued this year, he predicted.

FPIR recently went from a five-class to a seven-class rate structure, the FPIR Chairman observed. Some specialties have been moved to a lower premium class, while others have been raised, he said, and additional adjustments may be made in 1984.

Claims in Palm Beach County have been increasing so rapidly that it may find itself in the same rate category as Dade and Broward County, Dr. Astler added.

In conclusion, Dr. Astler appealed to physicians for assistance in getting more physicians into the Reciprocal, which now covers more than 5,100 FMA members. He praised FPIR President W. Harold Parham, D.H.A., and PIMCO President James W. Walker, M.D. "With Harold Parham and Jim Walker, we have a winning combination that is envied in the industry today," he said.

Dr. Parham was then called upon to present financial reports of both FPIR and PIMCO. He reported FPIR had income of $36,951,000 in 1982, with a net loss of $4 million, which will be taken out of surplus. Last December, FPIR paid out $5.6 million in five cases, three of which involved brain-damaged babies, and the other two relating to surgical infections. PIMCO had $3.4 million in operating expenses in 1982, with a loss of one million dollars.

Dr. Parham said the Florida Obstetric and Gynecologic Society is surveying members of that specialty to determine how many have given up obstetrics because of the claim risk.

During a question and answer period that followed, it was brought out that FPIR is considering offering a deductible policy. Premiums would be lower, but the insured physicians would have to assume a portion of the risk.

Trial lawyer claims that professional liability premiums amount to a very small part of a physician's income were disputed. The following average percentages of gross income spent on liability insurance were given: Internal Medicine, 4%; Radiology, 11%; Surgery, 15%; Anesthesiology, 19%; and Obstetrics and Gynecology, 23%.

Following the question and answer period, the conference was adjourned for lunch.

The luncheon speaker was Frank J. Jirka Jr., M.D., of Barrington Hills, Ill., President-Elect of the American Medical Association. His address was entitled: "The AMA: A Voice in Turbulent Times."

Dr. Jirka said that AMA would prepare a "Health Policy Agenda for the American People". This document will grapple with such questions as what part of the gross national product should be spent on health care; the long-term roles of the public and private sectors in the financing of health services; changes to be brought about by the increasingly competitive medical-health marketplace; changes in the supply and distribution of physicians and other health professionals; and how much should be spent on research, medical education and health care delivery.

AMA has joined with a dozen other organizations to form a steering committee for the Agenda, he said. The steering committee has appointed six work groups to investigate an equal number of policy areas. He identified FMA President Robert E. Windom, M.D., of Sarasota, and AMA Delegate

Charles K. Donegan, M.D., of St. Petersburg, as members of two of these work groups.

The Work Groups — on Health Education; Health Resources; Medical Science; Delivery Mechanisms and Processes; Evaluation, Assessment and Control Processes; and Payment for Services — met for the first time in Chicago last December. An Advisory Committee of about 150 people representing a variety of private and public organizations and institutions will monitor the performance of the work groups.

"Eventually, the policy principles and recommendations will be presented to the Steering Committee for final approval," Dr. Jirka explained, "and those that are approved will be used by each of the participating organizations to fashion its own health policies and proposals."

Keeping up with the times, AMA is developing programs to help physicians meet new problems and challenges, Dr. Jirka stated.

"We've embarked on a program to help physicians . . . adjust to the realities of increased competition," the AMA official elaborated. "We're giving them hard, medical, economic and social data on how to go about setting up or relocating their practices, and on how to be more effective in coping with the competition."

Dr. Jirka promised that AMA will never remain silent on issues to affect medicine.

"At the AMA we're greatly raising our voice in various public and private councils," he said. "And what we're raising our voice in favor of is the patient advocacy and the people advocacy that have always characterized this federation of ours.

"If prospective pricing mechanisms, PROs or anything else begin to hurt patients in terms of the quality and availability of care, then we're going to speak out and tell the public just where the blame lies. We're going to tell the public that in government, present appropriations rarely live up to past political promises, and that shifting the blame for the resulting cost is nothing more than political expediency."

The Saturday afternoon portion of the program was devoted to medical economics topics, and was presided over by FMA Vice President James F. Richards Jr., M.D., of Orlando.

The keynote address, entitled "Competition and/or Regulation" was presented by Walter McClure, Ph.D., President of the Center for Policy Studies, Minneapolis, Minn.

In one of the most provocative and challenging addresses heard at the FMA Leadership Conference, Dr. McClure declared the American health care system to be in "market failure", and unless American medicine helps bring about reforms, government will convert health care into a public utility within three to five years.

"While you are fighting the FTC and struggling with professional liability, the really important issues are being neglected," Dr. McClure asserted. "The issue is whether medicine will be a reformed private system or a public utility."

Acknowledging that reform will be painful, the keynoter said medicine must come up with ways to contain costs without any deterioration in the quality of medical care.

He dismissed as virtually meaningless such government actions as making Medicare payments six weeks later than in the past; and postponing until one month after age 65 the eligibility date for Medicare.

He divided health care providers into two basic types — the "elaborate expensive provider" and the "conservative efficient provider." Our present system favors the elaborate provider, he said, and this must be reversed. Incentives must be developed to encourage utilization of the conservative provider.

"We're not talking about sharing laundries or cheaper tongue depressers," he asserted. "We are talking about a massive change."

He stated that medical care expenditures in Miami, Fla., are 80% higher than the national average, while expenditures in Seattle, Wash., are 20% lower. A major factor in this 100% spread, he explained, are differences in provider practice styles that result in less frequent hospitalizations in Seattle.

As approaches to market reform, Dr. McClure suggested that consumers be provided with the means of distinguishing the conservative from the elaborate providers; and that there be strong incentives for choosing the conservatives.

As a means of controlling costs, Dr. McClure proposed competing health care plans, preferred provider organizations, and efficiency-related physician reimbursement.

In another disturbing forecast, the keynoter predicted that relations between physicians and hospitals will become increasingly tense as the competition thickens for the available health care dollars.

The remainder of the afternoon was devoted to a panel discussion of "The Issues and Florida's Physicians". Charles P. Hayes, M.D., of Jacksonville, Chairman of the Council on Medical Economics, served as Moderator.

Dr. Hayes summarized the major activities being undertaken by committees under his Council. James F. Richards Jr., M.D., will report later in the program on the Workers' Compensation situation.

The Committee on Relative Value Studies, under the leadership of Joel Mattison, M.D., of Tampa, is preparing revisions to the *1982 Relative Value Studies* which was published and distributed to FMA members last year.

The Committee on Business and Industry Relations, chaired by Robert E. Boyett, M.D., of Miami, is studying health coalitions. Such coalitions now exist in Dade, Duval and Hillsborough Counties.

Deceptive advertising by health maintenance organizations has been one of many matters of interest to Frank B. Hodnette, M.D., of Pensacola, and his Committee on Government Programs. The Committee also has been active with regard to Medicaid expansion and Medicaid mills, home health care costs and several other issues.

The Committee on Health Care Financing and its Chairman, William J. Garoni Jr., M.D., of Jacksonville, have been meeting with the medical directors of private insurance companies. In addition to IPAs and Medicaid, the Committee has been studying California's Redwood Foundation, which has contracted with the State to pay for fee-for-service health care to public assistance beneficiaries in a three-county area.

The Durenberger Bill, a part of the Tax Equity and Responsibility Act of 1982, and a subtitle concerning Utilization and Quality Control Peer Review (UQCPR) have been examined by the Committee on Peer Review Organizations, chaired by John N. Carlson, M.D., of Sarasota.

Other concerns of the Council on Medical Economics include Medicare assignment, AMA Model Clean Air Act, cost containment, and the Florida Task Force on Competition and Consumer Choices in Health Care.

Dick L. Van Eldik, M.D., of Lake Worth, reported on his sometimes frustrating experiences as one of two licensed physician members of the Florida Task Force on Competition and Consumer Choice in Health Care. The Task Force consists of 18 members, including representatives of both houses of the Legislature, nursing, hospitals, the insurance industry, labor, the general public and others. The Task Force was created to prepare and submit health care policy recommendations and implementation strategies to the Governor and the Legislature by March 1, 1984.

FMA Vice President James F. Richards Jr., M.D., of Orlando, gave a presentation on government-sponsored health care programs, many of which, he said, are under the supervision of the Florida Department of Health and Rehabilitative Services.

According to Dr. Richards, the FMA was successful in getting an increase to the 66⅔ percentile in the Workers' Compensation Fee Schedule, although FMA had sought the 75th percentile. The FMA will continue its efforts to bring about an equitable reimbursement level for physicians who participate in the Workers' Compensation program.

Former State Rep. Richard S. Hodes, M.D., of Tampa, now Professor and Chairman of the Department of Anesthesiology at the University of South Florida College of Medicine, spoke on "The New State Responsibility for Health Care Programs." The block grant program is enhancing the role of the states in government health care programs.

Dr. Hodes said Professional Standards Review Organizations (PSRO) are not dying out as was thought last year but to the contrary they are "coming back stronger than ever."

State Sen. William G. "Doc" Myers, M.D., of Hobe Sound, reviewed for the assembly the efforts of various allied health professions to establish their identity and to seek as much autonomy as possible. Efforts are being made, he said, to set up individual boards for which he sees no reason.

Such professions are important to the practice of medicine, Dr. Myers stated, but physicians should be aware of what is going on and assert themselves.

The final Saturday afternoon speaker was Rufus K. Broadaway, M.D., of Miami, a newly elected member of the AMA Board of Trustees, who gave a report on activities at the AMA level.

He noted that a Section on Medical Staffs has been created to give staffs a greater voice in the AMA House of Delegates. He praised the quality of the individuals who serve with him on the Board of Trustees and asserted that Florida has one of the most effective delegations in the AMA House of Delegates.

AMA membership is increasing and is about 11,000 members ahead of this time last year. Legislative activity is vital to medicine, he said. "There is no doubt that the future of medicine is going to be determined in Tallahassee and Washington."

FMA President-Elect J. Lee Dockery, M.D., of Gainesville, presided at the final session of the conference on Sunday morning. He introduced the session's keynote speaker, Mr. Roy Pfautch of St. Louis, Mo., President of Civic Service, Inc., and FMA Public Relations Consultant for the past several years.

Mr. Pfautch appealed to the audience to avoid short-term crises such as the professional liability problem to interfere with the need for development of long-range goals for the Association. He proposed that FMA appoint "a representative think tank . . . to examine itself (FMA) and put down some clear goals, objectives, and obtainable realities on a short and long term basis for this organization."

He visualized the "think tank" as including "the major strains of medicine, to find a unity base and not a diversity." Further, the thinkers should consider "service to people, as well as service to profession."

The goals developed, he went on, should be "interpreted to the membership at large and endorsed by a membership referendum."

As for the PLI crisis and FMA's plan to resolve

it, FMA "must create a network of allies and to do this means finding a ground on which to transfer our issue to a larger framework."

"Transference is a very valuable and valid political technique," Mr. Pfautch explained. "It basically means taking one's problem and moving it into a larger context where allies, friends and supporters can be enlisted to fight on one's behalf . . ."

He called upon FMA to develop a roster of opinion leaders in Florida and to use these individuals to help marshal public support for the issues in which FMA is interested.

Following Mr. Pfautch's presentation, FMA Past President Louis C. Murray, M.D., Chairman of the Council on Legislation, spoke on "Physicians' Involvement in the Political Process and Overview of the 1983 Legislative Issues." In his opening remarks, Dr. Murray observed that Florida's move to single-member legislative districts last year has resulted in a Legislature that is moderate to liberal in its thinking.

He said that activity at the grass roots is *absolutely necessary* if FMA is to be successful in the legislative arena. He identified the key people as the legislative key contact physicians; Auxiliary members involved in the "LEGS ALERT" Network; the local media contact physicians; and the county medical society legislative chairmen.

An effective key contact physician, Dr. Murray said, is well informed on the issues; understands the legislative process; gets to know his assigned legislator well; meets with that legislator several times each year; gives the legislator the opportunity to state his views; keeps his colleagues at the local level and FMA informed on where the legislator stands; and makes sure appreciation is expressed to the legislator when he votes for medicine's position.

FMA will be active in several issues in addition to tort reform during the April 5 to June 3 legislative session, Dr. Murray said. These include the statewide Workers' Compensation Fee Schedule; hospital privileges for chiropractors; and drug prescription privileges for optometrists.

Dr. Murray was followed to the podium by Frank C. Coleman, M.D., of Tampa, President of the Florida Medical Political Action Committee (FLAMPAC). The Pac enjoyed a banner year in 1982, he said, with membership reaching an all-time high of more than 6,000.

FLAMPAC contributed approximately $305,000 to candidates in 192 state legislative and congressional races, and enjoyed a high degree of success. All 15 FLAMPAC-endorsed congressional candidates won their races.

Dr. Coleman complimented Medical Action Team leaders for their efforts in support of FLAMPAC-endorsed candidates in the 1982 elections. They organized "get out the vote" campaigns and engaged in other supportive activities. Dr. Coleman presented MAT leaders with distinguished service certificates.

Mrs. Carolyn Spore of DeLand discussed Auxiliary involvement in the FMA legislative program and explained how the LEGS ALERT system works.

The 1983 Leadership Conference ended on a high note with presentations by two FMA legislative consultants, Mr. Mallory Horne and Mr. John French, both Tallahassee attorneys.

"We are at war with the trial lawyers," Mr. Horne, former State Senate President and Speaker of the House of Representatives, declared.

Senator Horne called for correction of "a faulty tort system that has been devastating to everything."

Mr. French said there are several facts and statistics related to the professional liability crisis in Florida that can be used to advantage in support of the FMA program. Non-physicians, for example, are shocked to learn that one in four physicians will be sued this year. (A figure that is now estimated to be one in three.)

He included among other useful information the fact that almost 70% of awards are for general damages; and that less than 40% of the PLI premium dollar ends up in the pockets of injured parties. The remainder represents the expensive costs of our tort system.

Various hospital groups in Florida have endorsed the FMA program, Mr. French observed and "we must reach out to the (hospital) trustees, who are influential people in their communities." The support of these trustees would have considerable impact on the Legislature.

FMA's principal opponent in the tort reform battle, the Florida Academy of Trial Lawyers, is a markedly different organization today than it was in the mid-1970s when the first PLI crisis hit Florida. Back then, Mr. French recalled, the Academy was of little influence, being quite naive about basic politics.

"They've changed," Mr. French said. "They've learned a lot from us."

FATL has a good political action apparatus, has generated good research, and is having more reasonable individuals present its case to the public.

The fact that it is easier to kill a bill than it is to pass one gives the trial lawyers an advantage going into the showdown, Mr. French said, but with teamwork and involvement FMA can prevail.

RELEASE

FMA

FLORIDA MEDICAL ASSOCIATION, INC.

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Editor's note: The following News Release addresses the results of a survey recently conducted by the Florida Obstetric and Gynecologic Society regarding the effects of the professional liability problem in Florida on Obstetrical care. A detailed report and analysis of the survey will be included in the April issue of *The Journal of the Florida Medical Association, Inc.*

FOR IMMEDIATE RELEASE

March 8, 1983
Contact: O. William Davenport, M.D.
(305) 279-3773

MIAMI—Florida women may find it difficult in the near future to locate an obstetrician to deliver their babies because of the increasing number of doctors who are discontinuing this practice, according to a survey by the Florida Obstetric and Gynecologic Society.

The survey, conducted by O. William Davenport, M.D., of Miami, President of the Society, reveals that of the 423 obstetrician/gynecologists responding to the questionnaire, 25% reported they have stopped the delivery of babies. Another 29% of the physicians who continue this practice are considering giving it up in the near future, according to the survey.

The number one reason given for discontinuing or planning to discontinue this practice is the state's medical malpractice problem which has resulted in spiraling malpractice insurance premiums and the increasing likelihood of doctors facing costly, traumatic court suits, the survey shows. Today, one out of every four Florida physicians will be involved in a malpractice claim during the next twelve months.

"Unless conditions improve I fear that all of the advance technology such as fetal monitoring, anesthesia and sterile techniques, which over the past half century have brought women from the kitchen table to the hospital for childbirth, will be abandoned," Dr. Davenport commented.

"I anticipate more deliveries by non-physicians as a result —it's sad," was the comment of one doctor participating in the survey.

"I am tired of living under the sword, wielded by a pack of blood-thirsty, ambulance-chasing lawyers," another doctor commented. "Awards and premiums are utterly ridiculous."

Another obstetrician said he was still delivering "but getting paranoid about it." Still another said he was practicing "fearfully and defensively."

According to the Florida Physicians' Insurance Reciprocal (FPIR), which insures more than 5,000 doctors for malpractice, the premium for an obstetrician/gynecologist practicing in Dade and Broward counties is $27,000 annually for the $500,000 minimum coverage. For the maximum $6.5 million coverage, the annual premium is $53,200. If the doctor discontinues his practice of obstetrics, the average premium decreases to $18,500 for the minimum coverage and $37,000 for the maximum.

Ninety-three percent of the respondents said they are insured for professional liability and, of those who indicated they are not, 70% said they dropped coverage because the premium was too high.

Currently, there are 38 claims pending against obstetricians in excess of a million dollars for allegedly brain damaged infants, an FPIR spokesman said.

Of the 698 questionnaires mailed in February, 423 were returned, a 61% response. The survey consisted of five questions but additional responses were volunteered from approximately 100 of the physicians.

(continued on next page)

"The survey indicates that the current professional liability problem is having a definite impact on the practice of obstetrics in Florida," Dr. Davenport said. "It will also adversely affect the practice of obstetrics in the future if it is not resolved."

Obstetrician/gynecologists who have discontinued deliveries are engaged in routine gynecological care and transferring their pregnant patients to other doctors who still practice obstetrics.

Although some respondents listed age, health and other personal reasons for discontinuing the practice of obstetrics, 63% said they gave up this practice because of the high risk liability problem.

Other comments from doctors who have stopped or plan to stop this practice were:

I ceased delivery of obstetrics in late 1976 at age 39 anticipating all the problems we now face. I continue to pay the full OB/GYN premium but will cease that if there is another increase in premiums.

Increasing difficulty meeting some patients' demands, guarantees for successful outcome, etc.

Dislike the atmosphere we are put in by the legal profession

Possibly, depends on what happens this year. If premiums keep rising I will be forced out even though I love obstetrics and desire to continue it.

I would love to stop because of absurdly high premiums. However, I have only been in practice for a few years and at least 70 percent-plus of my practice is obstetrics. I can't afford to continue, neither can I afford to stop.

I consider it impossible to continue the practice of obstetrics with the fear we all have that any unexpected poor outcome will end up in a lawsuit. Obstetrics is not an exact science. I cannot guarantee all my patients will have 100 percent good results—it doesn't matter how well trained I am!

I wish I could (stop). The increasing risk of taking care of obstetrical patients has taken the joy out of what once was one of the most rewarding areas of my practice—it's not worth the risk anymore.

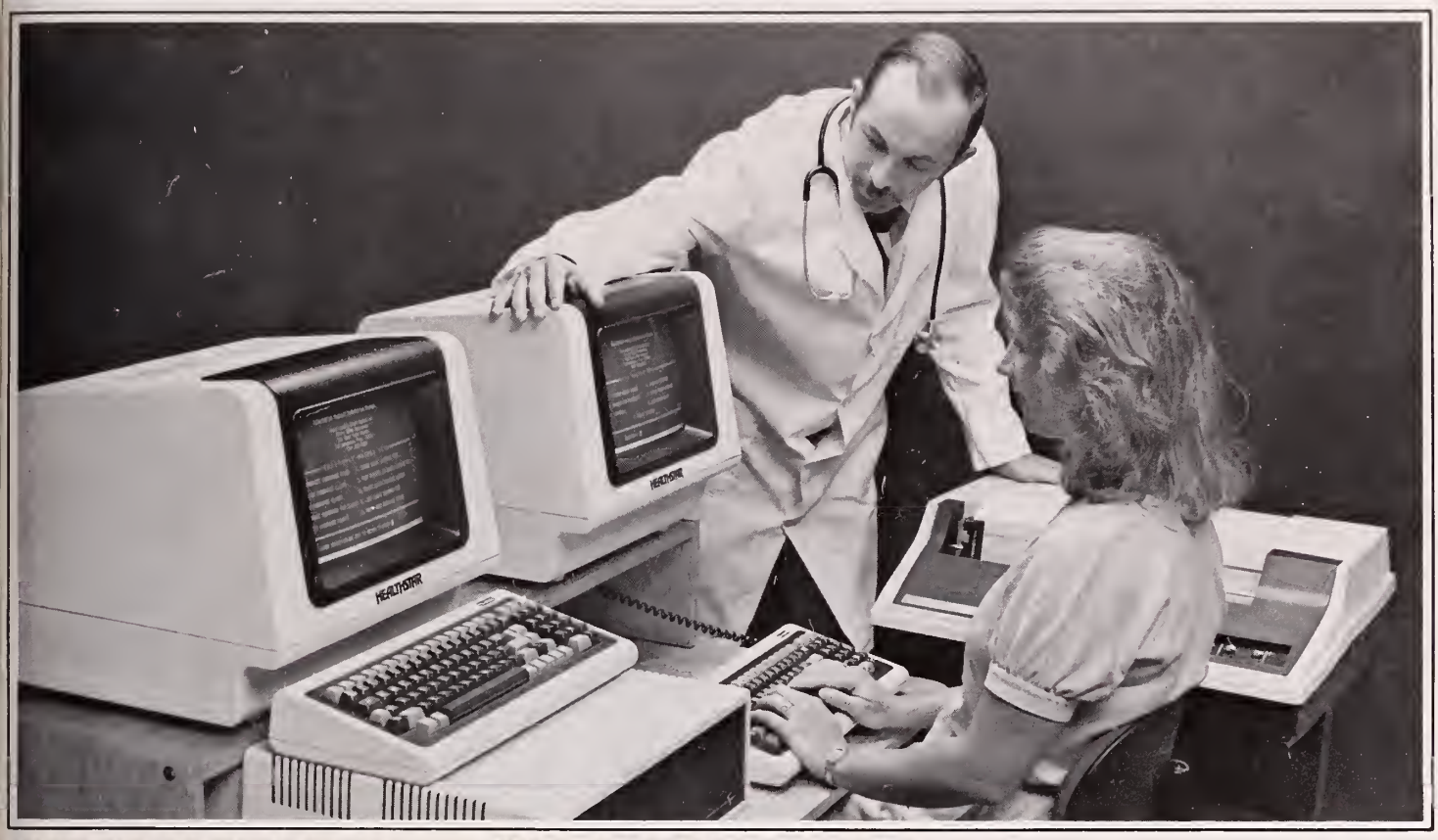
It's hard to pay those high premiums when I do 4-8 deliveries a month now.

Two sons in medical school—they were thinking of joining me but will now go to dermatology and radiology.

My son, who is in practice with me, does not deliver babies mainly because of the malpractice crisis.

We must do a better job in educating the public about the causes of brain damage and retardation. We need to erase their reflex response that it must've been malpractice.

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1

FLORIDA MEDICAL

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NOTES & NEWS

Dr. Copeland edits cancer textbook



Dr. Copeland

Edward M. Copeland III, M.D., professor and chairman of the Department of Surgery in the University of Florida's College of Medicine, is chief editor of a new comprehensive reference book describing the "state of the art" in diagnosis and treatment of malignancies.

Featuring the contributions of 62 recognized cancer specialists from across the nation, *Surgical Oncology* is a publication of John Wiley and Sons of New York.

Dr. Copeland, a noted expert in the surgical treatment of gastrointestinal soft tissue cancer and breast cancer, has authored the chapters on "Carcinoma of the Breast" and on the use of intravenous hyperalimentation (IVH) as a means for keeping cancer patients supported nutritionally.

Copeland points out in his chapter that "breast cancer is not a singular disease and each patient's treatment must be individualized, based on clinical examination, the anatomical location of cancer within the breast, and the pathological reports. Certain patients qualify for operative procedures that preserve the cosmetic appearance of the intact breast," he says, "but in other instances, modified radical mastectomy (which preserves the chest wall) may still be the procedure which offers the best chance for cure."

In the chapter on nutrition, Copeland notes "The importance of the relationship between nutrition and cancer has been recognized for many years, but not until the successful clinical application of intravenous hyperalimentation and enteral chemically defined diets did the doctor have proper tools for improving this relationship in the seriously ill patient. For the moment," he says, "IVH as a treatment modality for the cancer patient remains in the supportive category. Patients for whom there is no available anticancer therapy have benefitted little or none from the use of this technique."

General surgeons and other physicians who are called upon to evaluate patients with cancer will find the new book includes specific management programs for cancers affecting all major organs and tissues of the body. The authors also outline the benefits of specific therapies aimed at relieving or preventing complications common to many forms of cancer treatment, and give recommendations which may eliminate post-therapy morbidity and mortality. Emphasis is given to integrated therapy, with surgery and radiation used for local and regional control of disease, and with chemotherapy and possibly immunotherapy for the control of systemic disease.

Copies of *Surgical Oncology* are available in the University of Florida Health Center Library.

Videotape available on abdominal trauma

General surgeons and allied surgical professionals can benefit from the experiences of their peers by viewing the new Surgery Today ™ NETVN (R) (Norwich Eaton Television Network (R)) videotape program produced by Norwich Eaton Pharmaceuticals, Inc. The topic of the program is abdominal trauma.

Moderator and anchorman for the program is William McDermott, M.D., professor of surgery at Harvard Medical School and chairman of the department of surgery at New England Deaconess Hospital, Boston, MA. Co-host and special commentator for this program is G. Tom Shires, M.D., chief of surgery at Cornell Univesity, New York Hospital and current president of the American College of Surgeons (ACS). (Dr. Shires was chief of surgery at Parkland Hospital in Dallas, TX at the time President John F. Kennedy was killed.)

Drs. McDermott and Shires comment on the management of abdominal trauma at three eminent U.S. trauma centers: Denver General Hospital, The Shock Trauma Center at the University of Maryland, and the San Francisco General Hospital, where viewers will observe field management of the trauma patient, surgical treatment of both low-velocity and high-velocity penetrating injuries to the abdomen, resuscitation and evaluation of the patient with blunt abdominal and thoracic trauma.

Surgery Today ™ is available on a free loan basis to resident training programs in general surgery, to interested hospitals and to general surgery groups.

To arrange for free showings of Surgery Today ™ videotapes, contact your Norwich Eaton representative or write: Director of Professional Services, Norwich Eaton Pharmaceuticals, Inc., Norwich, New York 13815. Program tapes may be purchased at $60.00 each, Norwich Eaton's cost for the tape, reproduction and handling.

Ceremonies for new USF Cancer Center

Ground was broken on January 24, 1983 for the University of South Florida Cancer and Chronic Disease Research and Treatment Center. Special guests for the occasion were Governor Bob Graham and Baruch S. Blumberg, M.D., Ph.D., Nobel Laureate 1976. The ceremony took place at the Medical Center Campus with Master of Ceremonies USF President John Lott Brown assisted by Andor Szentivanzi, M.D., Dean of the College of Medicine. Representative H. Lee Moffitt, Speaker of the Florida House of Representatives and long time champion of the Cancer Center Project shared the honors.

Dr. Blumberg followed the ceremony the next day with an address entitled, "Prevention of Primary Cancer of the Liver". Through his research, Dr. Blumberg has shown that the hepatitis virus is the critical stimulus in transforming the chronic hepatitis of certain East African patients into a primary liver hepatoma. He has also helped develop a vaccine for the prevention of hepatoma now being produced by Merck-Sharpe & Dohme in Philadelphia, and recently released for human use by the FDA. This vaccine is the first useful vaccine developed for human cancer.

"Health Care Team: Interact '83" 109th Annual Meeting Scientific Program headliner

The 109th Annual Meeting Scientific Program is almost complete and one of its highlights promises to be the FMA sponsored symposium, "Health Care Team: Interact '83", Thursday afternoon, May 5th. Calvin W. Martin, M.D., Chairman of the Committee on Medical Education and Orris O. Rollie, M.D., Chairman of the Subcommittee on the Annual Meeting Scientific Program report that the program will address the challenge of emerging health care professions to the physician. Areas of disagreement and cooperation between physicians and other health care professionals will be explored.

President Robert E. Windom, M.D. will serve as program moderator and President-Elect J. Lee Dockery, M.D. will present a summary of the physician viewpoint.

As in the past, 20 hours of Category I CME credit will be available to program registrants. The final completed scientific program will be included in the April issue of *The Journal.* Make your plans to attend May 4-8, 1983 at the Diplomat Hotel, Hollywood.

PLI UPDATE

Termination of the doctor-patient relationship

One of the most frequent questions we respond to from physicians has to do with their legal authority to terminate the doctor-patient relationship. Inherent as part of this question is how such relationship should be terminated.

A recent case in California is illustrative of some of the legal principles in these situations.

In the case of Payton V. Weaver, 182 Cal Rptr 225 (1982), Brenda Payton was described as a 35 year old woman suffering from chronic end-stage renal disease. She received hemodialysis on an outpatient basis three times a week at a hospital. Ms. Payton lived alone in a low-income housing project and, in addition to her kidney problem, had been addicted to heroin and barbiturates for over 15 years. Apparently, she also had problems with alcohol. Dr. John Weaver, a kidney specialist, began treating Ms. Payton in 1975 and in December 1978, sent her a letter stating that she would no longer be treated at the dialysis center because of her "persistent uncooperative and antisocial behavior." Ms. Payton applied for admission to regular dialysis programs at two hospitals but was refused. Dr. Weaver continued to provide care to her on an emergency basis. In April 1979, he sent a second letter terminating his relationship with her. Ms. Payton filed suit, seeking a court order to compel continuation of treatment. A settlement was reached under which Ms. Payton agreed to improve her conduct by keeping her appointments, by refraining from the use of alcohol and drugs, by maintaining dietary restrictions, and by cooperating with her health care providers in all respects. Dr. Weaver continued to provide treatment until March 3, 1980, when contending that Ms. Payton had failed to fulfill any of her stipulations, he once again notified her in writing that her treatment would be terminated. Ms. Payton instituted a second legal action alleging that Dr. Weaver, the dialysis center, and the hospitals which had refused to accept her as a patient were violating her rights by failing to provide "emergency" treatment as required by law and by discriminating against her on the basis of race and indigency. The trial court denied her petition. On appeal the appellate court upheld the trial court decision finding that the doctor had behaved according to the highest standards of his profession. In addition, the court acknowledged the important right of health care providers to terminate the doctor-patient relationship under appropriate circumstances. The general

principle that health care providers have a right to terminate their relationship with a patient was recognized, but are obligated to do so in a manner consistent with the best interest of the patient.

Procedure for withdrawal ● If a physician wishes to withdraw from a case, he or she must give the patient reasonable notice of withdrawal in order that the patient may secure other medical attention if the patient so desires. What constitutes reasonable notice to the patient depends upon the circumstances of each case. However, it has been held by the courts that factors to be taken into consideration are the condition of the patient, size of the community, and the availability of other physicians. If the physician wishes to withdraw from a case, he or she should make this clear to the patient. To provide the physician with the greatest degree of protection, the physician should write a letter to the patient explaining the situation. The letter should be preferably sent by certified mail and a copy retained in the physician's files.

Submitted by John E. Thrasher, Vice President and Legal Counsel, Professional Insurance Management Company and Legal Counsel, Florida Medical Association, Inc.

DEAN'S MESSAGE

A model for medical school and community hospital cooperation

The University of Miami School of Medicine and the Veterans Administration Medical Center have joined the South Shore Medical Center in the development of a model system for geriatric care.

South Shore Hospital serves as the primary health facility for South Miami Beach, a predominantly geriatric and indigent community. In fact, South Shore has the highest percentage of geriatric patients of any hospital in the United States — over 90 percent geriatric for its acute care inpatient services, with a median patient age of 78 years. This affiliation will provide a natural geriatric laboratory, and will afford these institutions the unique opportunity to pursue patient care, education, research and community service activities in a clinical setting.

The combined expertise of the University of Miami School of Medicine, the Veterans Administration Medical Center and the South Shore Hospital has led to the implementation of many programs including:

(A) An Administration on Aging subcontract for patient education activities;

(B) An Arthur Vining Davis Foundation grant for condominium-based self-care for senior citizens' health education programs;

(C) A National Center for Health Services Research generic drug evaluation contract;

(D) Community-oriented CME for primary care physicians;

(E) A specialized geriatric in-service education program;

(F) A model discharge planning program utilizing a multi-disciplinary geriatric assessment and planning (GAP) team;

(G) A caregivers education program; and

(H) The first clinical geriatric fellowship — physician training program — in South Florida, jointly sponsored by the University of Miami School of Medicine, the Miami Veterans Administration Medical Center, and South Shore Hospital.

These programs were recently initiated and plans for the near future demonstrate a productive medical school-community hospital partnership. They are helping to provide services for the unmet needs of the predominantly older, ethnically diverse South Beach community while presenting an exciting spectrum of research and development opportunities for the School of Medicine. We feel that this type of cooperative effort will pay a vital role in the discipline of academic medicine and that it certainly merits support and expansion.

Bernard J. Fogel, M.D.
Vice President for Medical Affairs and Dean
University of Miami School of Medicine

William Zubkoff, Ph.D.
Colonel, USAF [Retired]
Administrator, South Shore Hospital

CORRESPONDENCE

On the professional liability crisis

To the editor: I would like to commend *The Journal* and the officers of the Florida Medical Association for all they are doing to resolve the malpractice crisis.

The heart of the problem, in my opinion, is that attorneys on a whole control not only our judiciary but also our legislative branch of government. This

control has led to abject abuse of the system with attorneys reaping huge sums of money for themselves, money of course coming ultimately from the general public.

The way to stop this abuse is to disallow attorneys from serving in the legislative branch of government. This can be done by passing a constitutional amendment making members of the Florida Bar officers of the judiciary and as such prohibit them from holding legislative office without first resigning from the Bar.

Such an amendment of the Florida Constitution would make the legislature more representative of the people. It also probably would improve the quality of our judiciary by forcing these members of the Bar who want to serve the public to run for judiciary office rather than legislative.

I feel if such an amendment was presented on the ballot at the next election we would win the support of the voters of Florida and possibly set an example for other states to follow.

Allen L. Sheer, M.D.
Tampa

To the Editor: Enclosed is a copy of a letter that each patient of mine is handed when she leaves the office. Imagine if all of the 20,000+ physicians of Florida would distribute similar letters to their patients. If only a half dozen from each doctor responded, that would be 120,000 letters concerning the malpractice crisis.

Hopefully more will be encouraged to do the same, and anyone is welcome to "borrow" the above letter.

John J. Fisher, M.D.
Jacksonville

Editor's note: Dr. Fisher's open letter is reprinted below for our readers' information and possible use.

An open letter to my patients and friends:

A large proportion of the overhead costs of this office is our premium for personal liability (malpractice) insurance.

Naturally, all the overhead of a medical office is paid for out of fees collected from patients.

The majority of the personal liability insurance dollar is paid to lawyers.

Therefore, the fee that I must charge you for medical treatment includes a fee to some attorney neither you nor I probably have ever met.

The same is true for medical charges made to you by the laboratory, the hospital, and the pharmacist.

To reduce this factor in ever increasing health care costs, legislation is needed to curb the legal abuse of the personal liability system.

The majority of Congress and a large percentage of state legislatures are made up of lawyers.

Naturally, they are reluctant to impose any control on the unbridled legal profession unless forced to by public opinion.

The only hope for change is for you to write your elected representative about this problem and bring such pressure to bear.

A sample letter:

> The Honorable Senator___: (or the Honorable Representative:) Please do something to curb the legal abuse of the personal liability (or medical malpractice) system.
>
> Or, the Honorable Senator___: (or the Honorable Representative:) I am concerned about the high cost of medical care owing to the malpractice crisis that exists in our state and country today. Please tell me what you are doing about it.

Of course an original letter of your own is more effective. A postcard will do. A telephone call or a telegram is even better.

Thank you,
John J. Fisher, M.D.

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BRIEF SUMMARY
PRDCARDIA® CAPSULES For Oral Use
(nifedipine)

INDICATIONS AND USAGE: I. Vasospastic Angina: PRDCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PRDCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and/or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PRDCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PRDCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PRDCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PRDCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PRDCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and/or increased fluid volume requirements have been reported in patients receiving PRDCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PRDCARDIA and a beta blocker, but the possibility that it may occur with PRDCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PRDCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PRDCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PRDCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PRDCARDIA.

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PRDCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: General: Hypotension: Because PRDCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PRDCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PRDCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug Interactions: Beta-adrenergic blocking agents: (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PRDCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PRDCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PRDCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers. The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PRDCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PRDCARDIA or concomitant antianginal medication. Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PRDCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGDT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PRDCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PRDCARDIA therapy, has been reported twice in the extensive world literature.

HOW SUPPLIED: Each orange, soft gelatin PRDCARDIA CAPSULE contains 10 mg of nifedipine. PRDCARDIA CAPSULES are supplied in bottles of 100 (NDC 0069-2600-66), 300 (NDC 0069-2600-72), and unit dose (10x10) (NDC 0069-2600-41). The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

More detailed professional information available on request.

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Quotes from an unsolicited letter received by Pfizer from an angina patient. While this patient's experience is representative of many unsolicited comments received, not all patients will respond to Procardia nor will they all respond to the same degree.

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*Procardia is indicated for the management of:
1) Confirmed vasospastic angina.
2) Angina where the clinical presentation suggests a possible vasospastic component.
3) Chronic stable angina without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or nitrates or who cannot tolerate these agents. In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks' duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in these patients are incomplete.

Please see PROCARDIA *brief summary on adjoining page*

Bactrim™ attacks the
(trimethoprim and sulfamethoxazole/Roche)
in acute exacerbations

Bactrim concentrates in serum and penetrates sputum[1-3]

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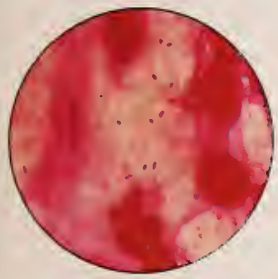
major pathogens of chronic bronchitis*

Bactrim clears sputum of susceptible bacteria

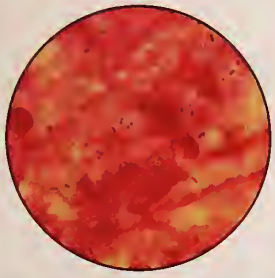
In sputum cultures from patients with acute exacerbations of chronic bronchitis, *H. influenzae* and *S. pneumoniae* are isolated more often than any other pathogens.[4,5] One study of transtracheal aspirates from 76 patients with acute exacerbations found that 80% of the isolates were of these two pathogens.[5]

Bactrim is effective *in vitro* against most strains of both *S. pneumoniae* and *H. influenzae*—even ampicillin-resistant strains. And in acute exacerbations of chronic bronchitis involving these two pathogens, sputum cultures taken seven days after a two-week course of therapy showed that Bactrim eradicated these bacteria in 91% (50 of 55) of the patients treated.[6]

attacks *H. influenzae*—even ampicillin-resistant strains



attacks *S. pneumoniae*



Bactrim reduces coughing and sputum production

In three double-blind comparisons with ampicillin *q.i.d.*, Bactrim DS proved equally effective on all clinical parameters.[7-9] Bactrim reduced the frequency and severity of coughing, reduced the amount of sputum produced and cleared the sputum of purulence.

Bactrim has the added advantages of *b.i.d.* dosage convenience and a lower incidence of diarrhea than with ampicillin, and it is useful in patients allergic to penicillins.

Bactrim also proved more effective than tetracyclines in 10 clinical trials involving nearly 700 patients.[10] Overall clinical condition of the patients, changes in sputum purulence, reduction in sputum volume and microbiological clearance of pathogens—all improved more with Bactrim therapy than with tetracyclines. G.I. side effects occurred in only 7% of patients treated with Bactrim compared with 12% of tetracycline-treated patients. (See Adverse Reactions in summary of product information on next page.)

Bactrim is contraindicated in pregnancy at term and nursing mothers, infants under two months of age, documented megaloblastic anemia due to folate deficiency and hypersensitivity.

Bactrim DS. For acute exacerbations of chronic bronchitis in adults* when it offers an advantage over single-agent antibacterials.

References: 1. Hughes DTD, Bye A, Hodder P: *Adv Antimicrob Antineoplastic Chemother 1*/2:1105-1106, 1971. **2.** Jordan GW *et al: Can Med Assoc J 112*:91S-95S, Jun 14, 1975. **3.** Beck H, Pechere JC: *Prog Antimicrob Anticancer Chemother 1*:663-667, 1969. **4.** Quintiliani R: Microbiological and therapeutic considerations in exacerbations of chronic bronchitis, in *Chronic Bronchitis and Its Acute Exacerbations: Current Diagnostic and Therapeutic Concepts;* Princeton Junction, NJ, Communications Media for Education, Inc., 1980, pp. 9-12. **5.** Schreiner A *et al: Infection 6*(2):54-56, 1978. **6.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **7.** Chodosh S: Treatment of acute exacerbations of chronic bronchitis: results of a double-blind crossover clinical trial, in *Chronic Bronchitis and Its Acute Exacerbations: Current Diagnostic and Therapeutic Concepts. Op. cit.*, pp. 15-16. **8.** Chervinsky P: Double-blind clinical comparisons between trimethoprim-sulfamethoxazole (Bactrim™) and ampicillin in the treatment of bronchitic exacerbations. *Ibid.*, pp. 17-18. **9.** Dulfano MJ: Trimethoprim-sulfamethoxazole vs. ampicillin in the treatment of exacerbations of chronic bronchitis. *Ibid.*, pp. 19-20. **10.** Medici TC: Trimethoprim-sulfamethoxazole (Bactrim™) in treating acute exacerbations of chronic bronchitis: summary of European clinical experience. *Ibid.*, pp. 13-14.

Economical b.i.d.

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole/Roche)

*Due to susceptible organisms. **Please see next page for summary of product information.**

Bactrim™

(trimethoprim and sulfamethoxazole/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note.* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency, pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100, Tel-E-Dose® packages of 100, Prescription Paks of 20 and 28. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500, Tel-E-Dose® packages of 100, Prescription Paks of 40. *Pediatric Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml), fruit-licorice flavored—bottles of 16 oz (1 pint).

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- For more information, please contact Dr. John Harrington, Pine Crest Box M, 1501 NE 62 Street, Fort Lauderdale 33334, phone 305-492-4103. Pine Crest has a policy of non-discriminatory admissions in all programs.

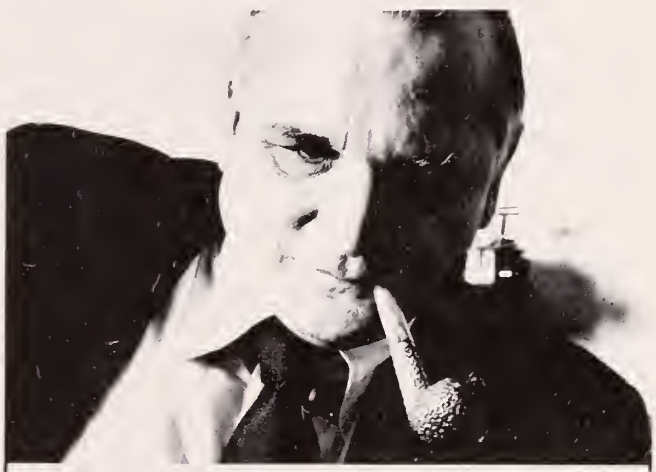
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Dr. Robert Smithdas is blind, nonhearing, and nonverbal. He is a published poet.

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Literature and medicine

By Kathryn Allen Rabuzzi, Annual subscription $12.95 individuals/ $25.00 institutions. State University of New York Press, Albany, N. Y. 12246, 1982.

Every human being has a story to tell and tells it in a variety of ways. When the patient relates the details of his medical history, he shares more than clinical facts; he is also revealing the personal drama of his struggle with life. A perceptive physician recognizes that the patient's responses to the clinician's medical questions contain significant clues to the undercurrents of a deeper level of experience. The uniquely talented physician also recognizes the seeds of literary masterpieces in the stories that are poured out in medical settings.

Brilliant physician writers such as Anton Chekhov, William Carlos Williams, Somerset Maugham and Walker Percy have creatively translated their observations of human experiences into stories that transcend technological expression and interpretation. The resulting stories provide fresh perspectives on the human condition, perspectives that can lead the reader to great personal insights.

The power of the story and its implications for medicine has inspired the creation of an exciting annual journal, *Literature and Medicine*. Kathryn Allen Rabuzzi, the editor, writes that the inaugural issue is "....designed to explain, probe, and illustrate the nature of the strange marriage between literature and medicine." Such notable medical writers as E. D. Pelligrino, Richard Selzer, Robert Coles and Thomas Szasz have contributed thought provoking essays on the relationship between medicine and literature. In this first issue, several university professors of English have also contributed their views on the role of storytelling in medicine. In writing about death and dying, Larry R. Churchhill of the University of North Carolina, and Sandra W. Churchill propose that "Storytelling is a way of placing oneself in the world, of signaling the meaning of events, of locating one's life and death. And it is from these powers that storytelling derives its ethical force."

Thomas Szasz writes that "Literature and medicine address humanity's most important and most intimate concerns....." Thus, *Literature and Medicine* has the potential for being a comforting and enriching companion for the one who journeys through the world of illness and daily views its dramas.

Elizabeth D. Vickers
Pensacola

- Mrs. Vickers is a former nursing educator. Some of her articles on the history of medicine in northwest Florida have appeared in the JFMA.

The heart of Southern
A look at Southern Medical and its Auxiliary

From its offices within the heart of Dixie at 2601 Highland Avenue in Birmingham, Alabama, the Southern Medical Association reaches out through the Southland to open its membership to eligible physicians in Alabama, Arkansas, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. First organized at the Read House in Chattanooga, Tennessee, in 1906, this professional society now encompasses a membership of over 26,000.

For a modest $50.00 in annual dues, physicians receive the *Southern Medical Journal*, an exclusive retirement and group insurance program, an annual scientific assembly and various other benefits. The Association has become a major force in its continuing medical education offerings which are said by Dr. Edwin C. Evans, past president, "to be leaders in showing the way to rational methods of top quality CME at reasonable cost." The Southern Medical Association continues to search for effective ways to broaden the scope of educational efforts toward the single goal of fostering scientific medicine and all that this goal implies.

Southern Medical introduced its Medical Practice Seminars in 1981, postgraduate regional conferences in 1982, and continues to develop its Dial Access system. For an additional fee of $5.00, members may avail themselves of the opportunity to call toll free from anywhere in the United States and listen to a recorded message of the latest medical information.

Contributions to medicine are recognized by an increasing number of awards. Panel discussions, poster presentations, clinical sessions, section seminars, and symposia are all regular features of the scientific assembly.

Central to the heart of Southern is the friendliness and good fellowship between physicians and their families. To assist in promoting this warm feeling and to help in the activities approved by the Association, there is the Southern Medical Association Auxiliary. Good news to physicians! There are no dues for auxiliary membership. Your spouse is a member of the auxiliary automatically when you are a member of the Southern Medical Association. Auxilians promote the annual meeting and programs of the Association, and encourage membership in Southern. Financial and tax seminars are arranged as part of the program for spouses at annual and regional meetings.

The Auxiliary promotes appropriate observance of Doctor's Day each March 30 to honor physicians, using the red carnation as the official flower. This public relations tool has proved invaluable and worthwhile as the membership strives to honor physicians through means such as community blood drives, contributions to health agencies and scholarship funds, and workshops. Doctor's Day became an auxiliary project in 1935 to commemorate the pioneer use of ether as an anesthetic by a Georgia physician, Dr. Crawford W. Long.

The Research and Romance project seeks to preserve our medical heritage through documentation of materials, exhibits, and data. The award for the most outstanding exhibit in Research and Romance at the 1982 Annual Scientific Assembly in Atlanta was the Dr. and Mrs. Milton O. Rouse Trophy presented to the State of Florida. A first for Florida, this award was given for the work done by the Alachua County Medical Auxiliary in cooperation with their medical society in rescuing, renovating, and preserving the Robb House in Gainesville, which is now used as a museum and houses offices for both the auxiliary and the medical society. *(JFMA, Vol. 69 No. 8)*

Is there a need for the Southern Medical Association? In the words of Dr. Margaret S. Klapper of Birmingham, "there is continuing need to come together in an atmosphere of friendship to address common goals."

References

1. Southern Medicine: Special Edition, Volume 69, Number 5, 1982. The Southern Medical Association: 75 years of service to the physicians of the South 1906-1981.

Isabella Laude (Mrs. Walter)
Babson Park

Roche salutes the history of Florida medicine

THE ICE MAN OF APALACHICOLA



Dr. John Gorrie

Medical history is replete with statistics regarding deaths from fever, and before the middle of the 19th century, little could be done to aid the afflicted. Yellow fever, smallpox, typhoid and scarlet fever were scourges that came in epidemics and caused rapid elevation of body temperature from which, all too often, the victim died.

Even for sunstroke patients, lowering body temperature—when attempted at all—was rough and crude treatment consisting of dunking the victim, often fully clothed, into cold water.[1]



Patented invention

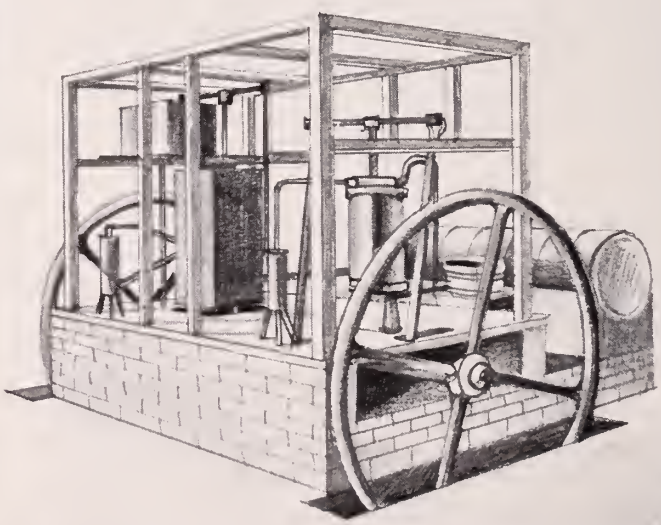
It was, therefore, a significant medical development when, on May 6, 1851, U.S. patent No. 8080 was granted to Dr. John Gorrie of Apalachicola for his mechanical refrigeration technique that perfected the process for making artificial ice.[2]

Dr. Gorrie installed his artificial ice machine in the United States Marine Hospital in Apalachicola;[2] there it came to the attention of other Florida physicians, who began to explore ways of using the ice-making process in preventing and treating yellow fever.[3]

Now a necessity

Today its medical applications are myriad—medications are kept fresh, foods are kept chilled, germs are kept under control, patients are kept comfortable and, often, treatments include applications of ice packs. All these conveniences and treatments—and more—are direct descendants from the historic invention of Dr. John Gorrie.

References: 1. Headquarters The hospital, chap. 7, in Lee RV, Elmerl S *et al: The Physician.* New York, Life Science Library, Time Inc., 1967, p 149. 2. Kane JN: *Famous First Facts,* 3rd ed.; New York, The H. W. Wilson Co., 1964, p 518 3. Day SM: *J. Fla. Med. Assoc. 69*:719, 1982.



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When the history reveals anxious depression...

For the estimated 70 percent of nonpsychotic depressed patients who are also anxious,[1] Limbitrol provides both amitriptyline, specific for symptoms of depression, and the effects of Librium® (chlordiazepoxide HCl), the tested and dependable anxiolytic. Limbitrol is, therefore, a better choice for these patients than dual agents that contain a phenothiazine, a class of antipsychotic drugs used infrequently in nonpsychotic patients.[1]

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Limbitrol also has a rapid onset of action which may lead to greater patient compliance. In a multicenter study, patients taking Limbitrol experienced 62% of their overall improvement within the first week of therapy.[2]

In another multicenter study,[3] the following symptoms associated with anxious depression were significantly reduced during the first two weeks of therapy:

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- ☐ Gastrointestinal upset—73%

In two multicenter studies, only 1.9% of Limbitrol patients experienced cardiovascular side effects.[3]

Patients should be cautioned about the combined effects with alcohol or other CNS depressants and about activities requiring complete mental alertness such as operating machinery or driving a car.

References: 1. Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine,* edited by Jorvik ME; New York, Appleton-Century-Crofts, 1977, p. 316. **2.** Feighner JP *et al: Psychopharmacology 61:* 217-229, Mar 1979. **3.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

The specific antianxiety/antidepressant

Limbitrol® 5/12.5 10/25

Tablets 5-12.5 each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)
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Please see summary of product information on following page.

LIMBITROL TABLETS Ⓝ Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of moderate to severe depression associated with moderate to severe anxiety

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction

Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: **Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated. sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitations. myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly.

Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.

How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500, Tel-E-Dose® packages of 100, Prescription Paks of 50

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Read Rules Carefully

1. All entries must be original work.
2. Pictures must be framed and wired for hanging. (Stands will be provided for sculpture, etc.)
3. Each entry must have a typed card indicating Name, Address, Medium, Dimensions and Title. Please list price if entry is for sale; otherwise, mark not for sale (NFS).
4. Only one artist's name should be listed for each registration slip.
5. A registration fee of $10 will be charged for each entry. Entry fees are tax deductible. Entry fees will be donations to AMA-ERF, divided equally among Florida medical schools.
6. All registration slips and checks must be sent in together no later than April 15, 1983.
7. All pre-registered entries are to be delivered by hand to the Exhibit Hall at the Diplomat Hotel no later than 3:00 p.m., Wednesday, May 4. Shipped entries will be refused.
8. All entries must be picked up noon Saturday, and must be signed out before removal from the show.
9. We will not be responsible for entries not picked up by 12:00 Noon, Saturday, May 7, 1983.
10. Doctors, spouses of doctors and doctors' children are eligible to enter.

Kindly enter my registration to show in the Benefit Art and Crafts Show.

Fee of $_____for_____entries is enclosed. I agree to abide by the rules and regulations for exhibiting material in the show.

Name _____

Address _____

City_____County _____

I will be showing in the following categories: Please check (X) appropriate category (categories) and division applying to your entry (entries). Division: (1) Adult_____ (2)Youth_____

Category: () A. Painting. Include any media in color: acrylic, oil, casein, collage, watercolor, pastel, etc.

Size:_____(H) x_____(W) To be hung on wall.

() B. Graphics. Include a pen and ink, charcoal, photography, etc.

Size:_____(H) x_____(W)

() C. Crafts. Include sculpture, pottery, ceramics, mosaic, weaving, quilting, handwork, etc.

Size:_____(L) x_____(D) x_____(H)

() I am the son/daughter of a Florida physician. Age_____

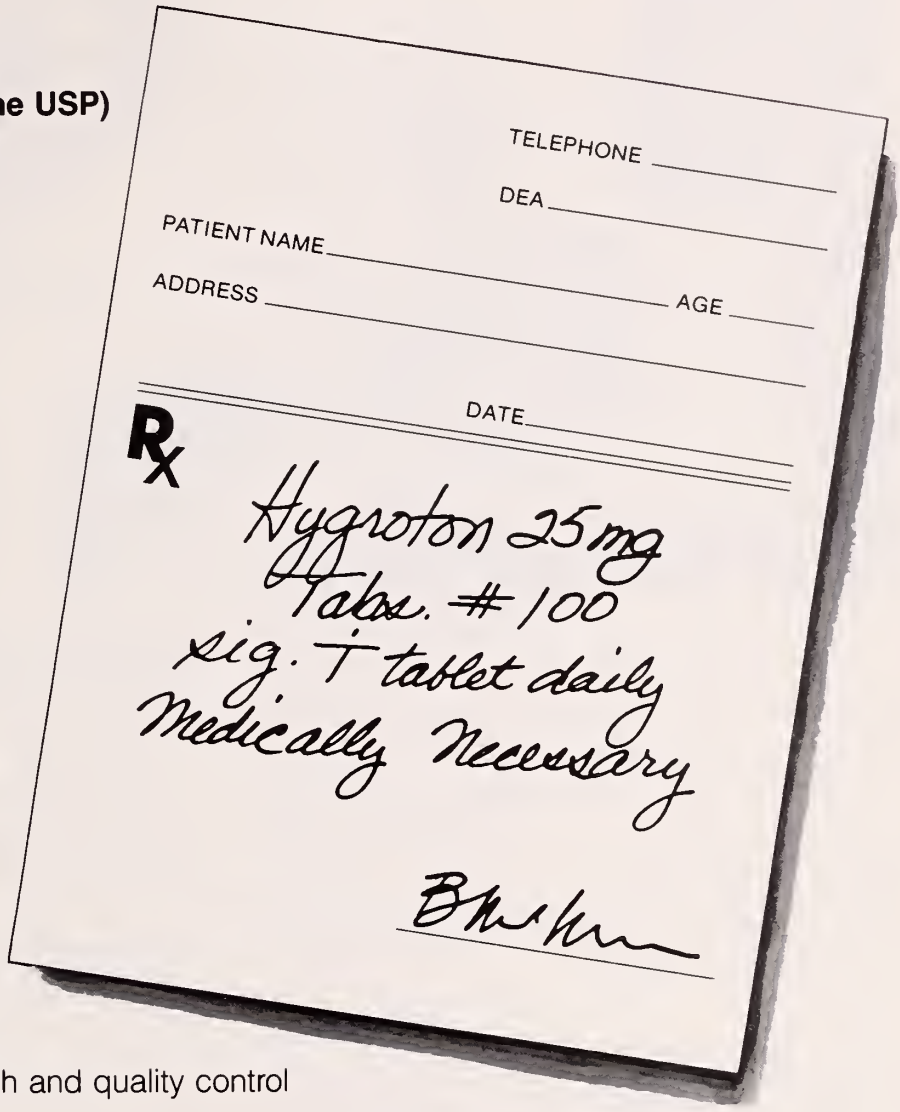
"Awards of Merit" and "Best in Show" will be judged by experts in art, photography and crafts.
An "Editor's Award," given by *The Journal of the Florida Medical Association,* will be used on the cover of a future issue of *The FMA Jornal.*
A registration fee of $10 will be charged for each entry. Make checks payable to: FMA-A Art Show, Mrs. R. B. Moore, 121 Pine Trail, West Palm Beach, Florida, 33406, (305) 655-2598.
NOTE: It is most important to know the size of your art objects, paintings, etc., to enable us to display them more professionally. We will not be responsible for damage or loss of any entry.

REGISTRATION DEADLINE—APRIL 15, 1983

Over 100,000,000 Rxs in 20 years

Specify only Hygroton® (chlorthalidone USP) for predictability and dependability





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BRIEF SUMMARY

Indications: Hypertension, adjunctive therapy in edema.

Contraindications: Anuria, hypersensitivity to chlorthalidone or other sulfonamide-derived drugs.

Warnings: Should be used with caution in severe renal disease, impaired hepatic function or progressive liver disease. May add to or potentiate the action of other antihypertensive drugs. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma. There is a possibility of exacerbation or activation of systemic lupus erythematosus with thiazides, which are related to chlorthalidone. This has not been reported with chlorthalidone. Thiazides cross the placental barrier and appear in cord blood. Use in pregnant women requires that the anticipated benefits of the drug be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. In nursing mothers, thiazides cross the placental barrier and appear in breast milk. If use of the drug is essential, the patient should stop nursing.

Precautions: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals. All patients receiving chlorthalidone should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Hypokalemia may develop with chlorthalidone as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH. Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity. Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather. Hyperuricemia may occur or gout be precipitated in certain patients. Insulin requirements in diabetic patients may be increased, decreased, or unchanged and latent diabetes mellitus may become manifest. Chlorthalidone and related drugs may increase the responsiveness to tubocurarine. The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient. Chlorthalidone and related drugs may decrease arterial responsiveness to norepinephrine. If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy. Chlorthalidone and related drugs may decrease serum PBI levels without signs of thyroid disturbance.

Adverse Reactions: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis; dizziness, vertigo, paresthesias, headache, xanthopsia; leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia; purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis) (cutaneous vasculitis), Lyell's syndrome (toxic epidermal necrolysis). Orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates or narcotics. Other adverse reactions include hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness, impotence. Whenever adverse reactions are moderate or severe, chlorthalidone dosage should be reduced or therapy withdrawn.

Usual Dose: One tablet daily

How Supplied: Tablets—100 mg. (white, scored), 50 mg. (aqua) in bottles of 100, 1000 and 5000; 25 mg. (peach) in bottles of 100 and 1000; unit-dose blister packs, boxes of 100 (10 x 10 strips).

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125-D

Meetings

Accepted by the FMA Committee on Continuing Medical Education for Mandatory Credit

APRIL

New Topics Lymphoid Pathology, April 5, Holy Cross Hospital, Ft. Lauderdale. For information: Jon R. Fichtelman, M.D., 4725 N. Federal Highway, Fort Lauderdale 33308, (305) 492-5728.

The Psychiatric Will and Sex by Prescription, April 7, Mai Kai Restaurant, Ft. Lauderdale. For information: Peggy Jackson, MSW, Henderson Mental Health Center, 330 SW 27th Avenue, Ft. Lauderdale 33312, (305) 791-4300.

Care of the Critically Ill, April 7, Center for Professional Development, Tallahassee. For information: Donald Beeckler, M.D., P.O. Box 12219, Tallahassee, (904) 878-4127.

Spring Rheumatology Seminar, April 8-9, Alachua General Hospital, Gainesville. For info: Lourdes C. Corman, M.D., 801 SW 2nd Avenue, Gainesville 32602, (904) 377-0083.

Advanced Cardiac Life Support, Apr. 8-10, Pasco-Hernando Community College, New Port Richey. For information: James M. Marlowe, M.D., Post Office Box 1058, New Port Richey 33552, (813) 842-9574.

Family Practice Weekend - University of South Florida, April 8-10, Tampa Hyatt Regency Hotel, Tampa. For information: John E. Perchalski, M.D., 10320 56th St., Temple Terrace 33617, (813) 988-7345.

Boca Raton Community Hospital's Sixth Annual All-Day Cancer Seminar, April 9,Dawson Theatre,Boca Raton. For information: Betsy Whisman, CME Coordinator, Boca Raton Community Hospital, Inc., 800 Meadows Road, Boca Raton 33434, (305) 395-7100.

Controversies in Snakebite Therapy, April 9, West Florida Hospital, Pensacola. For information: John Gage, M.D.,8383 N. Davis Highway, Pensacola, (904) 478-4121.

Practical Primary Care, April 18-22, Laver's Resort & Racquet Club, Delray. For information: Leighton Smith, M.D., Chairman, Dept. Family Practice, Lutheran General Hosptial, (305) 696-2210.

13th Annual Radiation Therapy Clinical Research Seminar, April 28-30, University of Florida Health Center, Gainesville. For information: James T. Parsons, M.D., Box J-385, JHMHC, Univ. of Florida, Gainesville 32610, (904) 392-3161.

Orthopedic Update for Primary Care Physicians, April 29-May 1, Holiday Inn Beach Resort, Pensacola. For information: Andrew C. Gygi, M.D., 5150 Bayou Boulevard, Suite 2E, Pensacola 32503, (904) 477-9631.

MAY

International Symposium of Tissue Repair - Biological and Clinical Aspects of Soft and Hard Tissue Repair, May 11-15, Innisbrook at Tarpon Springs. For info.: Symposia Medicus, 2880 Shadelands Dr., Suite 404, Walnut Creek, CA 94598.

American Cancer Society National Conference - Breast Cancer 1983, May 19-21, Boston Sheraton Hotel, Boston. For information: Nicholas Bottiglieri, M.D., 777 Third Avenue, New York, NY 10017, (212) 371-2900.

JUNE

Medico Surgical Concepts in Chest Disease, June 12, Hyatt Regency Hotel, Tampa. For information: Americo Gonzalvo, M.D., 5415 West Laurel Blvd., Tampa 33607, (813) 879-3400.

34th Annual Scientific Assembly, June 15-19, The Breakers Hotel, Palm Beach. For information: Lee A. Fischer, M.D., (305) 968-7600.

Arrhythmias and Cardiac Ischemia: Diagnosis and Management, June 24-26, Orlando Hyatt. For information: Howard Bronson, M.D., 64 Inverness Dr., E., Englewood, Colorado 80112, (303) 333-1577.

Boca Raton Community Hospital, Inc.

Sixth Annual All-Day Cancer Seminar

Prostate and Bladder Carcinoma

Saturday, April 9, 1983
8 a.m. to 4 p.m.
Dawson Theatre

Speakers: Marc B. Garnick, M.D.
Genevieve M. Matanoski, M.D.
Fatholloh K. Mostifi, M.D.
William U. Shipley, M.D.
Willet F. Whitmore, M.D.

Moderator: James F. Glenn, M.D.

Seven (7) hours category 1 credit through Boca Raton Community Hospital.

This program is made in cooperation with the American Cancer Society, Palm Beach County Unit.

For more information:
Betsy Whisman
CME Coordinator
(305) 393-4088

Charge: Free to members of BRCH staff. $25 to cover cost of lunch and breaks for all others.

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CARDIOLOGY CONSULTANTS, P.A.

PRESENTS

SIXTH ANNUAL POSTGRADUATE SEMINAR

"THE DIAGNOSIS AND MANAGEMENT OF TACHYARRHYTHMIAS"

APRIL 15 & 16, 1983

PENSACOLA COUNTRY CLUB — PENSACOLA, FLORIDA

CO-SPONSORED BY:

THE AMERICAN HEART ASSOCIATION, WEST FLORIDA CHAPTER &
THE PENSACOLA EDUCATIONAL PROGRAM

GUEST FACULTY: **Joaquin G. Arciniegas, M.D.**, Assistant Professor of Medicine, Department of Medicine, Division of Cardiology, University of Alabama, Birmingham, Alabama; **Charles Fisch, M.D.**, Distinguished Professor of Medicine, Director, Cardiovascular Division, Indiana University School of Medicine, Indianapolis, Indiana; **R. Joe Nobel, M.D.**, Clinical Professor of Medicine, Indiana University School of Medicine, Indianapolis, Indiana; **R. Kirby Primm, M.D.**, Assistant Professor of Medicine, Director, Heart Station, Vanderbilt University School of Medicine, Nashville, Tennessee; **Joey L. Trantham, M.D.**, Fellow, Cardiology and Electrophysiology, Duke University Medical Center, Durham, North Carolina; **Galen S. Wagner, M.D.**, Associate Professor of Medicine, Department of Medicine, Cardiovascular Division, Duke University Medical Center, Durham, North Carolina.

LECTURES:

Friday, April 15

12:00 - 12:15 Welcome & Introduction - W. Daniel Doty, M.D.

12:15 - 1:00 Ashton Graybiel Lecture - Electrocardiography: Past, Present, and Future Directions - Charles Fisch, M.D.

1:00 - 1:30 General Principles of the Diagnosis and Treatment of Cardiac Arrhythmias - R. Joe Noble, M.D.

1:30 - 2:00 Basic Electrophysiology: Conduction, Automaticity, Re-entry, Trasmembrane Action Potential (rapid and "slow" channels), Refractoriness - Joe Trantham, M.D.

2:00 - 2:30 Break

2:30 - 3:00 Diagnosis of Supraventricular Tachyarrhythmias: Atrial Tachycardias, Fibrillation, Flutter, Junctional Tachycardias - Galen S. Wagner, M.D.

3:00 - 3:30 Antiarrhythmic Drugs: Mechanism of Action and General Principles of Clinical Use - R. Kirby Primm, M.D.

3:30 - 4:00 Therapy of Supraventricular Tachycardias - Galen W. Wagner, M.D.

4:00 - 5:00 Panel Discussion

5:00 - Happy Hour

Saturday, April 16

8:30 - 9:00 Diagnosis of Ventricular Arrhythmias and Differentation from Aberrancy - Charles Fisch, M.D.

9:00 - 9:30 The Mechanism(s) of Ventricular Tachyarrhythmias; Risk Factors for Sudden Death; Therapeutic Implications - R. Kirby Primm, M.D.

9:30 - 10:00 Approach to Prophylaxis and Therapy of Recurrent Ventricular Tachyarrhythmias - R. Joe Noble, M.D.

10:00 - 10:30 Break

10:30 - 11:00 Role of Intracardiac Electrophysiological Studies in the Diagnosis and Management of Tachyarrhythmias - Joaquin Arciniegas, M.D.

11:00 - 11:30 Digitalis Induced Arrhythmias and Clinical Electrophysiological Correlation - Charles Fisch, M.D.

11:30 - 12:30 Panel Discussion

12:30 - 1:45 Lunch

1:45 - 2:15 Role of Ambulatory Monitoring and Exercise Testing in the Management of Arrhythmias - R. Joe Noble, M.D.

2:15 - 2:45 Surgical Treatment of Supraventricular Tachyarrhythmias - Joe Trantham, M.D.

2:45 - 3:15 Break

3:15 - 3:45 Surgical Treatment of Ventricular Tachyarrhythmias - Joaquin Arciniegas, M.D.

3:45 - 4:15 Use of Pacemakers in the Treatment of Tachyarrhythmias - R. Kirby Primm, M.D.

4:15 - 5:15 Selected Case Presentations (Panel)

ACCREDIATION: As an organization for continuing medical education, the Pensacola Educational Program designates this continuing medical activity to meet the criteria for 11 credit hours in Category I of the Physician's Recognition Award of the American Medical Association.

The program has been reviewed and is acceptable for 11 prescribed credit hours by the American Academy of Family Practitioners.

This seminar has been approved for 11 contact hours for nurses. Provider Number H000063 (Baptist Hospital).

(Please Detach & Mail with Check)

GULF COAST CARDIOLOGY 1983

April 15 & 16, 1983 — Pensacola, Florida

Please register me in the seminar "GULF COAST CARDIOLOGY 1983"

Name _____ Telephone _____

Address _____ State _____ Zip _____

Type of Practice _____

Please check one: ☐ Physician$100
☐ Nurse/Paramedical$ 50

The registration fee includes coffee breaks, the reception on Friday, and Saturday lunch.

Confirmation will be sent upon receipt of registration, along with a guide for local hotel listings and rates.

NOTE: Transportation will be provided to the Pensacola Country Club from the Holiday Inn, Pensacola Beach.

Classified Ads

Classified advertising rates are $10.00 for the first 25 words or less and 25 cents for each additional word. Deadline is first of the month preceding month of publication.

Physicians Wanted

WANTED FAMILY PHYSICIAN, ABFP required. Central Florida area. Negotiable terms. To join established physician ABFP. Reply to C-1085, P.O. Box 2411, Jacksonville, Florida 32203.

FLORIDA — Emergency Physician positions available now. We have openings for Locum Tenens, Full and Part-Time Physicians. Flexible scheduling, quality rural and metropolitan hospitals. Malpractice insurance and competitive hourly rates. Write Julius M. Garner, M.D., Dept. J, 238 N. Westmonte Rd., Suite 110, Altamonte Springs, Florida 32701 or call Sandy Teal at (305) 788-0786.

PHYSICIANS WANTED to form medical - dental complex, either condominium or individual buildings. Special interest rates well below prime rate may be available for total financing. Write: Dr. M. Max Weaver, One Doctors Lane, Lake Wales, FL 33853 or call (813) 676-8536.

FREE STANDING EMERGENCY CENTERS in Florida and Tennessee for either experienced or residency trained family or emergency physicians. Competitive salary with bonus incentives. Send C.V. to All Care Medical Centers, Inc., 395 North Douglas Road, Altamonte Springs, FL 32701 or call (305) 788-6611.

FLORIDA — North and central Florida locations convenient to both coasts. Excellent private practice opportunities for family practitioners and internists. Liberal assistance and benefits package. Submit curriculum vitea to: Director - Professional Relations, P.O. Box 749, Gainesville, Fla. 32602.

DIABETOLOGIST OR ENDOCRINOLOGIST: Large multi-specialty clinic with co-located hospital on the Florida West Coast is seeking a BC/BE Diabetologist or Endocrinologist to join an established rapidly growing practice. Training in Insulin Pump Therapy preferred. Excellent income opportunity with no investment required. Our location offers unlimited cultural, recreational and leisure activities. Send C.V. to C-1133, P.O. Box 2411, Jacksonville, Florida 32203.

INA HEALTHPLAN South Florida Practice Opportunities. We are seeking Board Certified/Eligible Physicians for positions in Miami and Ft. Lauderdale. Emphasis on providing quality care — minimizing business responsibilities. Enjoy predictable leisure time in the Sunshine State. Comprehensive salary and benefits package. For more information, send your C.V. to: Joan Harris, INA Healthplan, P.O. Box 3800, Miami, Florida 33169.

PRIMARY CARE FACILITY in West Palm Beach seeking part time physicians for hourly work. Send C.V. to Administrator, Post Office Box 25986, Tamarac, Fla. 33320.

NORTH FLORIDA LOCATION — OB/GYN: opportunity to establish an immediate, busy practice in a very pleasant North Florida community. JCAH accredited hospital. Liberal assistance and benefit package. Submit curriculum vitae to: Director, Professional Relations, P.O. Box 749, Gainesville, FL 32602.

CARDIOLOGIST - Board certified/Board eligible to join Group 20 Board certified and subspecialty certified internists. Academic stimulus; modern hospitals. Financially rewarding. Beautiful area. Write with CV to C-1131, Post Office Box 2411, Jacksonville, Florida 32203.

VACANCY AVAILABLE in Jacksonville and Tallahassee for physician consultant in state agency disability determinations. Must be licensed in Florida. Forty hour week with no night work, all holidays and weekends free. Should be capable of interpreting ECG's. No direct patient care. Call Dr. Davis (305) 896-4691.

EMERGENCY POSITION, best Gulf Coast location, moderate load, perfect family area. Flexible scheduling, directorship possibility, salary commensurate. Immediate opening, private group. Box 1085, Punta Gorda, FL 33950, or call (813) 639-5725.

WANTED: Pediatrician to join solo practitioner in semi-rural area in West Central Florida. Christian preferred. Good area to raise children. Outdoor recreational areas abound. Contact David W. Powers, M.D., 415 North Central Ave., Inverness, FL 32650. (904) 726-8660.

BOARD CERTIFIED or Board Eligible pediatrician to join a four pediatrician practice. Prefer pediatrician with extra training or interest in neonatology. Immediate opening. Salary with early partnership. Send resume to: Dr. William B. Simmons, 2115 14th Street, Meridian, MS 39301.

FLORIDA GULF COAST — Positions available in free standing emergency center for either experienced or residency trained family or emergency physicians. Competitive salary with attractive benefits and incentives. Send C.V. to EmergiCenter, Bernie Reames, Administrator, P.O. Box 12004, Pensacola, FL 32589, or call (904) 434-1175.

ANTERIOR SEGMENT FELLOWSHIP in busy private practice associated with Medical College. Intraocular Lens Implantation, including posterior chamber and anterior chamber lenses. Extracapsular and Phacoemulsification techniques. Excellent salary plus fringes. Send C.V. and career objectives to: C-1134, Post Office Box 2411, Jacksonville, Florida 32203.

FAMILY PRACTITIONER to be added to a rapidly growing 25 man multi-specialty group on Florida's Treasure Coast with an existing 5 man Family Practice Department. Excellent full time opportunity for Board Certified or eligible Family Physician. Excellent salary and many benefits and incentives provided. For further information, please send CV to C-1135, Post Office Box 2411, Jacksonville, Florida 32203.

FLORIDA — PHYSICIANS needed: Internal Medicine, (Pulmonary, Oncology, Rheumatology, Invasive Cardiology), Neurologists, Family Practice. Gulf Coast area, multi-specialty center. Lucrative financial package. Beautiful community. Please send C.V. to Gail Leo, Healthcare Management Group, Two Riverchase Office Plaza, Suite 100, Birmingham, Alabama 35244 or call (205) 988-4488.

PHYSICIAN WANTED: General Internists, ABIM required; to join established physician, ABIM in Venice, Florida. Partnership considered. Reply to A. Van Caneghem, M.D., 530 Nokomis Avenue, Venice, FL 33595. Area code 813-484-3511.

Situations Wanted

PEDIATRICIAN, 37, seeking relocation in Florida. Please write to: P.O. Box 7736, Caguas, Puerto Rico 00626. Phone: (809) 743-3616.

ANESTHESIOLOGIST: ABA eligible in June 1983. Seeking private practice with group of 3 or 4 anesthesiologists in Florida with population of 40,000-100,000. Phone: (312) 975-1600, page Dr. Vemuri. Home: (312) 528-8388.

ANESTHESIOLOGIST: Board eligible, working in all fields of anesthesiology including open heart and Ob. Available from July '83. Wish to relocate in Florida for group/practice of fee for service. Write: Dr. V. Kardani, 408 Elkin Residence, 5501 N. 11th Street, Philadelphia, PA 19141.

NEPHROLOGIST: Major university trained, seeks solo or group practice in Florida. Would also consider full time employment. Reply: C-1130, Post Office Box 2411, Jacksonville, Florida 32203.

EXPERIENCED CANADIAN DIAGNOSTIC RADIOLOGIST; Canadian Fellowship and Florida license. Extensive background in general, procedural and C.T. Radiology. Age 52 yrs.; excellent health; no social or habitual problems. Available for interview. Phone or write Dr. J. David Moir, 2773 Rothesay Road, East Riverside, Saint John, N.B., Canada E2H2L4, (506) 847-3798.

HUSBAND (BC in Pediatrics) and WIFE (BE in Neonatology) both currently holding full time academic appointments at a major midwestern medical center wish to relocate on the Florida coast. Full time hospital based practice with administrative/teaching responsibilities plus a part time neonatology position at a Level II or III nursery preferred. Other opportunities will be considered. Please contact C-1121, Post Office Box 2411, Jacksonville, Fl 32203.

INTERNIST — presently practicing in Florida desires to relocate. Group, partnership or solo considered. Available immediately. (305) 949-0376.

WANTED: PRACTICE IN Internal Medicine, Part time or shared. Smaller population area. Boards in Int. Med., Semi retired, desire location change. C-1129, P.O. Box 2411, Jacksonville, FL 32203.

BOARD ELIGIBLE Orthopedic Surgeon would like to join a group on the East Coast of Southern Florida. Contact Robert Fink, M.D., 1701 E. 12th Street, Apt. 115 West Wing, Cleveland, Ohio 44114. Phone: (216) 344-3944.

FLORIDA ANESTHESIOLOGIST actively taking the Boards seeking part-time position sharing with colleague. Reply C-1132, P.O. Box 2411, Jacksonville, FL 32203.

FLORIDA: Emergency Physian positions available, primarily in the Jacksonville, Ft. Lauderdale, Tampa and Panhandle areas, for American trained, experienced physicians. Flexible scheduling, competitive rates and malpractice insurance provided. Send C.V. to Deborah Smith, 4419 Cowan Rd., Suite 303, Tucker, GA 30084, or call (404) 493-6701.

Practices Available

BUSY GENERAL PSYCHIATRIC PRACTICE available April 1. Fine opportunity. Near hospitals. Experienced receptionist. Incumbent stepping down. Easy terms. Call (904) 434-1213 or write P.B. Phillips, M.D., 1515 W. Moreno, Pensacola 32501.

ESTABLISHED GROWING Internal Medicine-Cardiology practice in the Florida Keys. Excellent opportunity to practice good medicine and enjoy water recreation. Building suitable for two physicians. Will stay to introduce well qualified M.D. C.V. to Post Office Box 486, Tavernier, Fla. 33070.

DEERFIELD BEACH, FL Share 5½ days per week. Fully furnished med/sur office. Three exam rooms, lab, waiting room, business office. Best suited for GP, Psychiatrist, Med/subspecialist, Podiatrist, Ortho/surgeon. P.E. Callaghan, M.D., 4800 N.E. 20th Terrace, Ft. Lauderdale, Fla. 33308, (305) 771-8510.

OB/GYN PRACTICE FOR SALE. Aspen, Colorado. Gross over $200,000. For details write: Box 11626, Aspen, Colorado 81611.

ESTABLISHED, outstanding UROLOGY PRACTICE in central Florida. Gross income over 450K. Modern, completely equipped office. Hospitals nearby. Will stay to introduce. Call evenings (305) 862-6130.

OPHTHALMOLOGIST'S office 1350 sq. ft., available for rent in Medical Center adjacent to a community hospital. 107 Medical Center, Sebring, Florida 33870, (813) 385-0149.

IN AN AREA WHERE medical community services approx. 40 to 50M. Recently remodeled 5,000 sq. ft. masonry building consists of complete x-ray with automatic processor, laboratory, 3 consultation rooms, 11 examination rooms, centralized dictation system, waiting rooms, business offices with patient medical records in excess of 20M. Over one acre lot on main street has plenty of parking and room for expansion. Close to two modern hospitals where staff privileges are available to qualified physicians. Specialty consultants available. Close proximity to Jacksonville and Gainesville. Gross 400M plus with financing and physical plant negotiable. Contact Cliff Martin, Realtor Assoc. W.D.C. Real Estate, Inc., P.O. Box 906, Lake City, FL 32055. Phone (904) 752-7535 or nights (904) 752-0110.

MODERN PHYSICIANS office building and all equipment, including lab and x-ray for sale. Family Practice averaging 20 pts. per day. $300,000. Terms available. $50,000 down required. Call Larry Neufeld, M.D., 4002 W. Waters Avenue, Tampa 33614, (813) 963-0096.

INTERNAL MEDICINE — Active practice, lower West Coast, take over office and equipment. Reply: C-1136, P.O. Box 2411, Jacksonville, FL 32203.

Real Estate

FOR SALE — LAKE PARK, FLORIDA, medical building, 2016 sq. ft. Four year old concrete block, central air and heat. 12,500 sq. ft. landscaped corner lot, black top parking, main street. Reply: C-1117, P.O. Box 2411, Jacksonville, Florida 32203.

IN BOOMING BIG PINE KEY on two lots, 5 room corner stone house. Two room shed suitable for lab, x-ray. Ideal for semi-retirement. Zoned for residence and M.D. practice. Phone: (305) 872-2000.

OUTSTANDING LOCATION FOR SPECIALISTS: St. Nicholas Medical Center. Central location, off street parking and all utilities furnished (including janitor service). Contact W.G. Allen Jr., Owner-Manager, St. Nicholas Medical Center, 3127 Atlantic Blvd., Jacksonville, Florida 32207. Phone (904) 398-5500.

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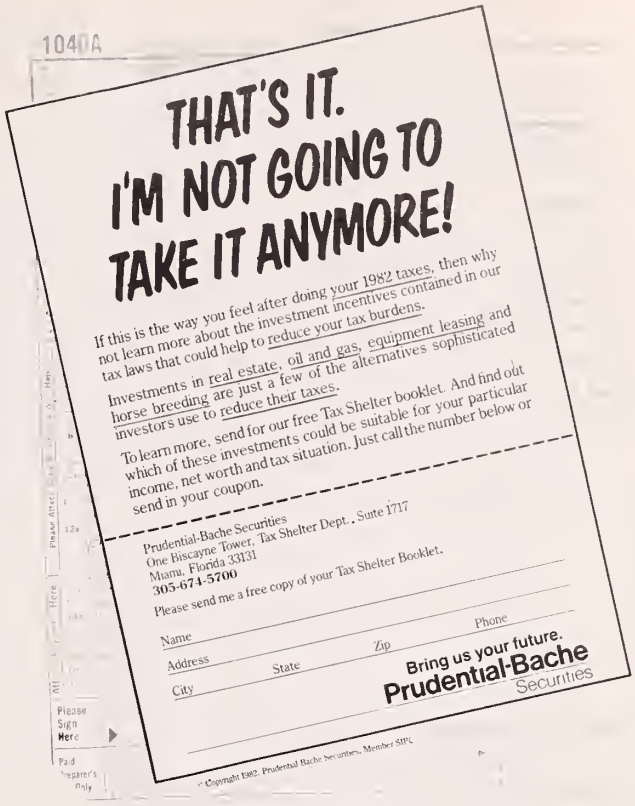
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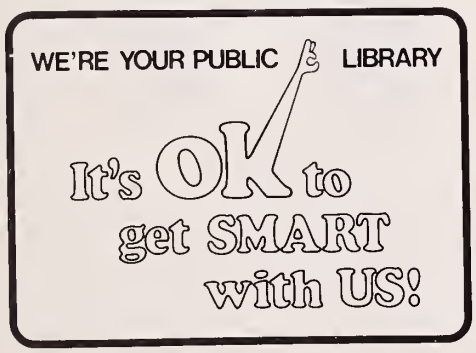
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MARCH 19-20, 1983 — Advanced Cardiac Life Support Instructors Course. Provider Name: Emergency Medical Continuing Education Seminars Provider #:27MO509. 16 (sixteen) contact hours applied through the AMA, Category I of the Physicians Recognition Award. For further information call: EMCES Office (904) 396-5682.

APRIL 14-15, 1983: Advanced Cardiac Life Support Provider Course. Provider Name: Emergency Medicine Continuing Education Seminars. Provider #: 27MO509. 16 (sixteen) contact hours applied through the AMA Category I of the Physicians Recognition Award. For further information call: EMCES Office (904) 396-5682.

JUNE 27-30, 1983: Emergency Department and Emergency Group Management Seminar: Jay W. Edelberg, M.D., Course Director. Location: Marriott Hotel, Hilton Head, South Carolina. As an organization accredited for continuing medical education, the Jacksonville Health Education Programs, Inc., designates this continuing medical education activity as meeting the criteria for 24 credit hours in Cat. 1 of the Physician's Recognition Award of the American Medical Association. For further information, please call: (904) 396-5682, EMCES office in Jacksonville.





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References: 1. Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

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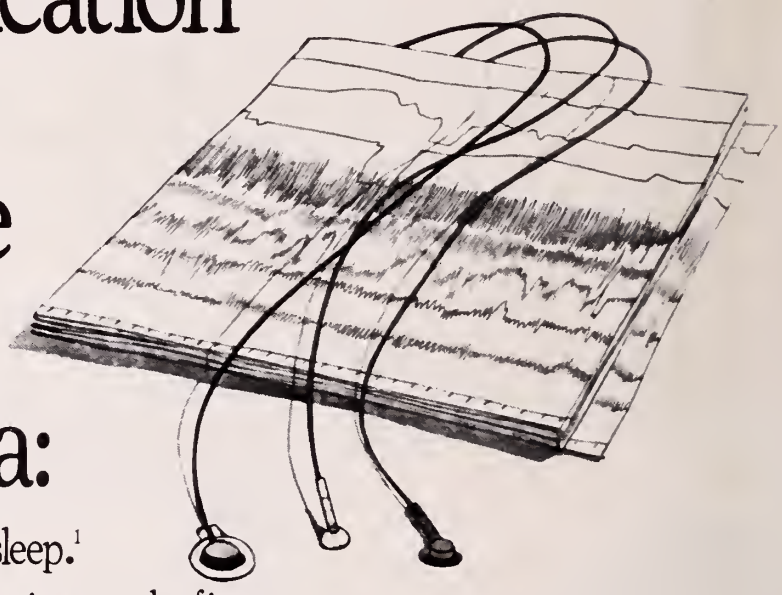
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Summary of the FMA Board of Governors Meeting March 11-12, 1983

The following is a summary of the major actions taken by the Board of Governors at its meeting March 11-12, 1983:

THE BOARD:

AMA/GTE Telenet Medical Information Network

Authorized the FMA to become the distributor in the state of Florida for the AMA/GTE Telenet Medical Information Network. This service, offered by the AMA and GTE, provides an ever-changing product that will eventually be used by health care providers worldwide.

Through a computer terminal, a physician will be able to obtain state-of-the-art information in their office or home. The network can communicate with the vast majority of available data equipment including a simple word processor. Therefore, for an individual to participate in this system does not necessarily mean a substantial investment in computer hardware. Presently, the network service includes: drug information; disease information; CME bulletin board; AMA meeting bulletin board; MED/MAIL electronic mail; medical procedure coding and nonemclature; socio-economic bibliographic information; and document order service. As a distributorship, FMA's responsibilities will include: market development (Florida); customer service; market feedback (reporting to AMA/GTE problems encountered); and administrative services. The future potential benefits to the Association's membership as a result of the Telenet Network are substantial and far reaching.

COUNCIL AND COMMITTEE REPORTS

The Board of Governors reviewed the reports and recommendations of the FMA Councils and Committees and took the following actions:

AMA DELEGATES

Election of FMA/AMA Delegation Chairman

Recommended that the House of Delegates' amendment to the FMA Bylaws to authorize, immediately following the Association's Annual Meeting, the election by FMA/AMA Delegates and Alternate Delegates of a chairman and vice chairman of the Delegation, both of whom shall be AMA Delegates.

COUNCIL ON LEGISLATION

Reaffirmed professional liability reform as the Association's number one legislative priority and adopted the FMA's position regarding the following legislative proposals:

Clinical Laboratory Act

Approved the recommendation of the Council on Legislation that the FMA endorse the sunset of Chapter 483, Florida Statute, Clinical Laboratory Act. The Board concluded that because of extensive federal laws and regulations regarding clinical laboratories, there was no longer a need for state law.

Approved a position of "active opposition", if Chapter 483, Clinical Laboratory Act, is retained, to removing the exemption from the statute of five or less physicians doing laboratory work in a private office setting.

Approved a position of "active opposition", if Chapter 483, Clinical Laboratory Act, is retained, to mandate direct billing for laboratory services by independent laboratories.

Workers' Compensation

Reaffirmed FMA's position that the Workers' Compensation fee schedule should pay physicians at the prevailing fees in the community and that a statutory mandate to establish a uniform statewide physicians' fee schedule for the Workers' Compensation should not be established.

Physical Therapy Law

Approved a position to "actively oppose" legislation proposed by the Florida Physical Therapy Association to change the Physical Therapy Law. The Board feels that the definition of physical therapy as proposed in the legislation needs to be rewritten and that electromyographies not be performed unless a physician is present.

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Anxiety

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Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taker continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

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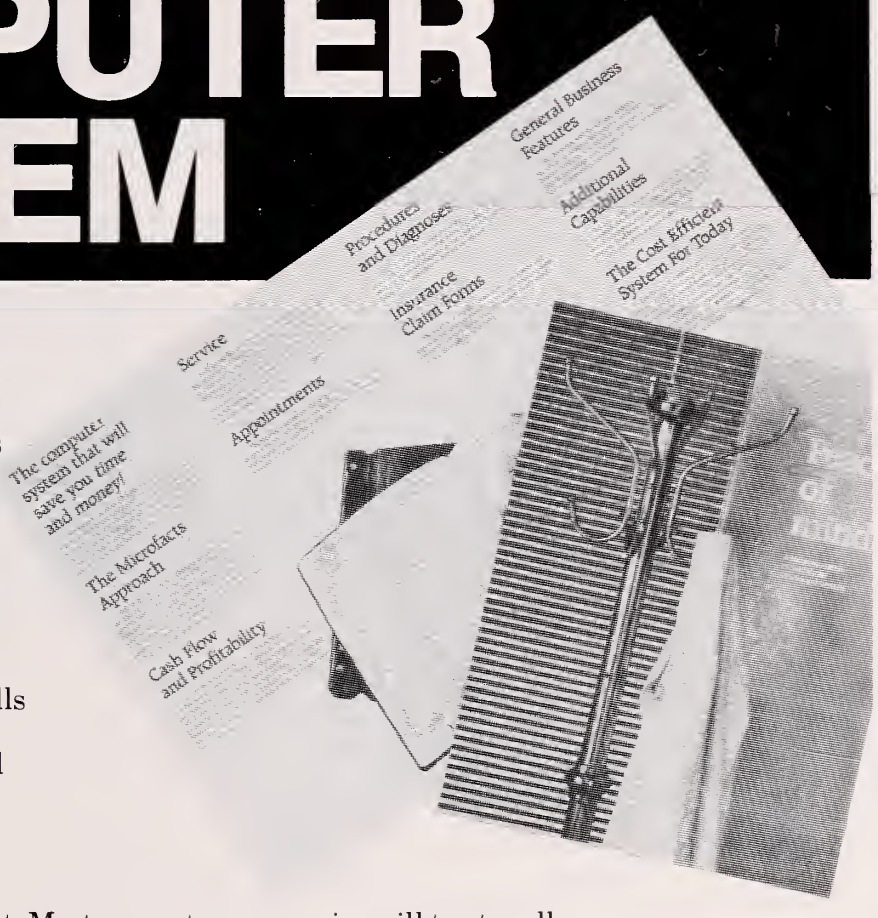
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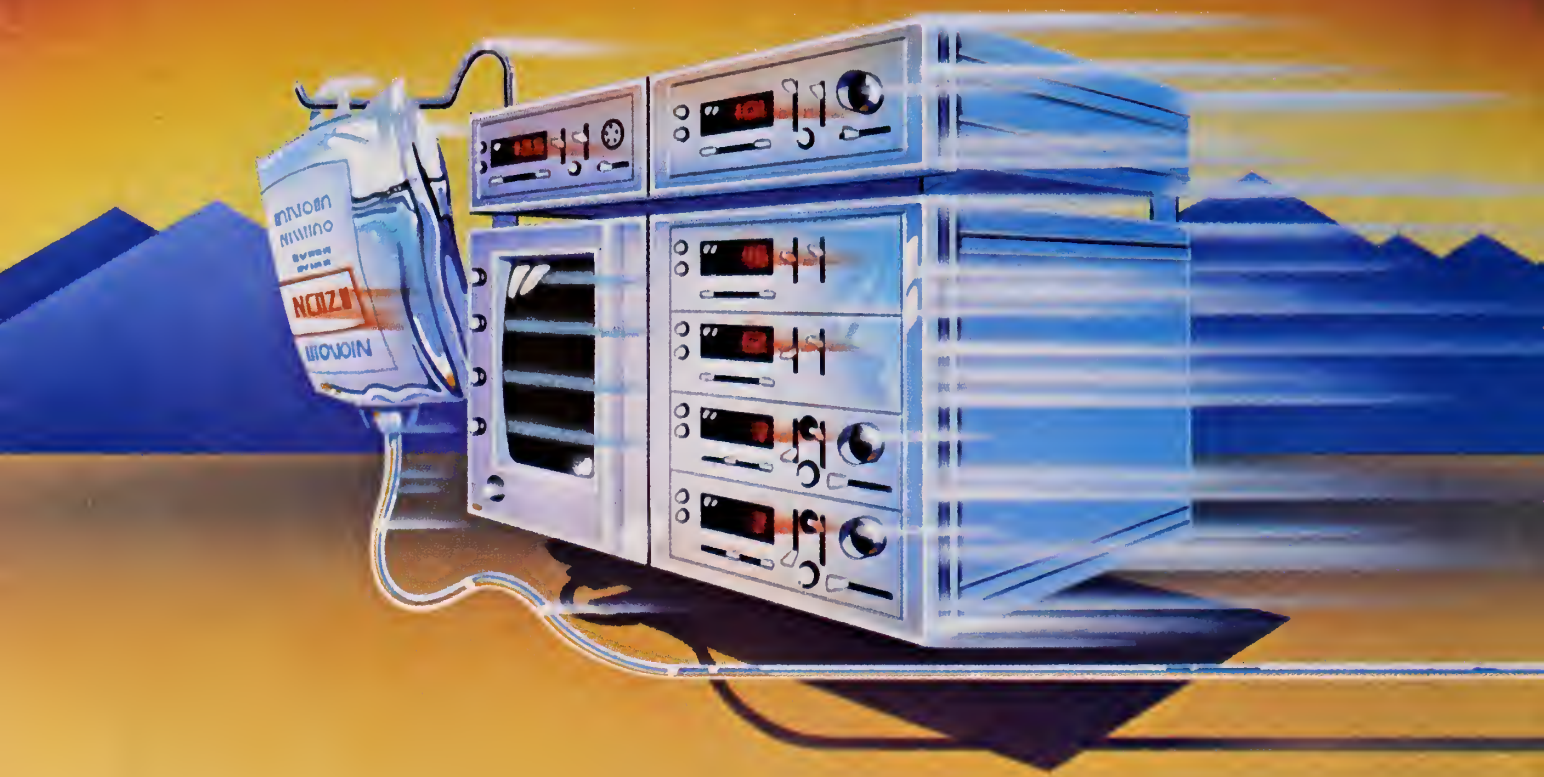
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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION, INC.

April 1983, Vol. 70, No. 4

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The cover for this month's Auxiliary Special Issue on Learning Disabilities is taken from a poster created by Grey Advertising of New York for the Foundation for Children with Learning Disabilities; the poster was inspired by the artwork of a dyslexic child.

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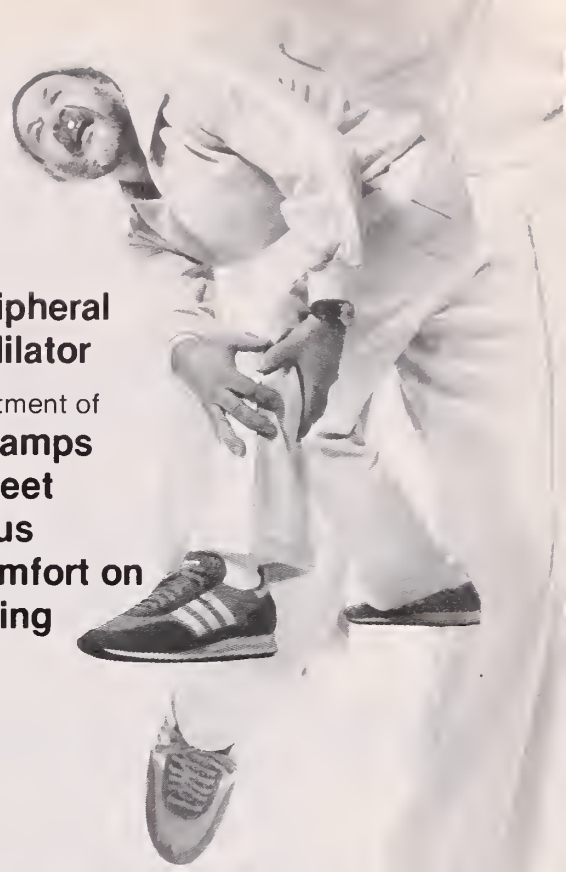
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ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 μg/ml and 0.09 μg/ml, respectively.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5%-100%)	–	–

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
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US Patent 3,657,267
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PRESIDENT'S PAGE



A day does not pass without someone referring to the high cost of medical care. This may be in conversation with a patient or a friend, or else in some form of the media. It has become so frequently expressed that one must thoroughly examine the issue and see what can be done to reverse this trend.

If physician fees are measured as part of the portion of the total health-dollar pie, the gradual increase has not been remarkable. However, if we look at the cost of those services for which physicians are responsible, directly or indirectly, the amount becomes quite significant. This is the area that needs scrutiny to determine where physicians can be helpful and have a positive effect on lessening health care costs.

No one has to tell any physician how technology has aided us in our profession. Our capability to improve our diagnostic and therapeutic armamentarium has afforded us opportunities that were never imagined 20 years ago. Multiple types of devices and equipment may have application for similar diagnostic and therapeutic utilization, but each one may have an advantage over the others for specific needs. The state of the science has moved rapidly over the past decade to the point that the physician frequently uses more than one device because of not being certain which one will do the best job. Only time and experience will provide the information to allow us to be more definitive in detection. Yet I still do not forsee the time when "one call will do all".

Hospital patient care has seen us use many advanced techniques to more accurately assess the patient's care day by day, critical or routine. Not infrequently the clinician perceives what is going on, but the ability to precisely document that perception is now available in many instances — arterial blood gases for variable cardio-pulmonary conditions; intravascular and external monitoring devices to assess varying changes in cardio-pulmonary physiology; organ-stimulating devices to maintain near normal function; and many other means to help the patient over a critical period.

As the utilization of these remarkable advances has increased, so has the tendency of the physician to more readily rely on them. This is the area we must address. Are we making these decisions soley because we cannot handle the situation any other way? Or are we giving these orders to save us from having to make a true appraisal of the patient's condition and turning over the responsibility to others on the health-care team to rely on technical equipment for our own convenience? Numerous articles in the medical literature suggests the latter approach does exist. Where can we correct this?

A physician's extensive training period provides the opportunity to utilize all forms of testing procedures in order to gain confidence in dealing with comprehensive patient care. The confidence he gains from this training gives him a basis to practice medicine in an efficient manner. Continuing medical eduation programs enhance this confidence level and his ability. Yet do we rely enough on this clinical confidence or do we give into the craze of monitor mania that engulfs us today? Some estimates suggest physicians do this not because of lack of confidence in clinical judgment but because of the trend to practice defensive medicine in a society gone astray because of the professional liability problem. If 10% or more of the health care dollar is spent for defensive medicine, is it not likely that physicians get into the habit and order tests and procedures that are not absolutely necessary in order to provide good medical care but just because they are available?

No one can accurately assess the exact amount of unnesessary expenditure of money that adds to the escalating cost of medical care today. To make our contribution toward lessening these costs, let us scrutinize our own practice and our own attitudes regarding our personal participation in the system. If one has the confidence in his judgment about a patient's condition based upon the absolute minimum of assistance necessary to achieve that confidence, let us not seek further support just because it is available. Patients respect a confident physician; physicians desire understanding patients. This physician-patient relationship needs to be completely established in every encounter. Economic improvement would auto-

matically be a passive consequence of this clinical encounter which in no way would lessen the quality of medical care rendered. The public would realize the limitations that medical science can achieve in a human body that in itself has great adaptive mechanisms to respond to disease, altered physiology and biochemistry, and to all forms of injury. Let us equally realize the limitations the science of medicine has in correcting human problems, and particularly realize that intervention in certain instances, no matter how noble, may cause the human condition to accelerate its deterioration rather than normally adapting to the insult.

I feel confident that physicians will continue to exert energy and offer talent and expertise to always provide the best care possible to any patient. To do this and at the same time ease the economic burden upon society will require absolute dependence upon clinical confidence and judgment to manage a patient who must equally share confidence that the physician also is human and both are doing their best to achieve the most satisfactory results, whatever the problem may be.



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References 1. Pitts NE, Migliardi JR: *Clinical Pediatrics* 13:87, 1974. **2.** Modell W: *Drugs of Choice* 1980-1981. C. V. Mosby Co., St. Louis, 1980, p. 362. **3.** Goodman LS, Gilman A: *The Pharmacologic Basis of Therapeutics*, 6th edition, MacMillan Publishing Co., Inc., New York, 1980, p. 1032.

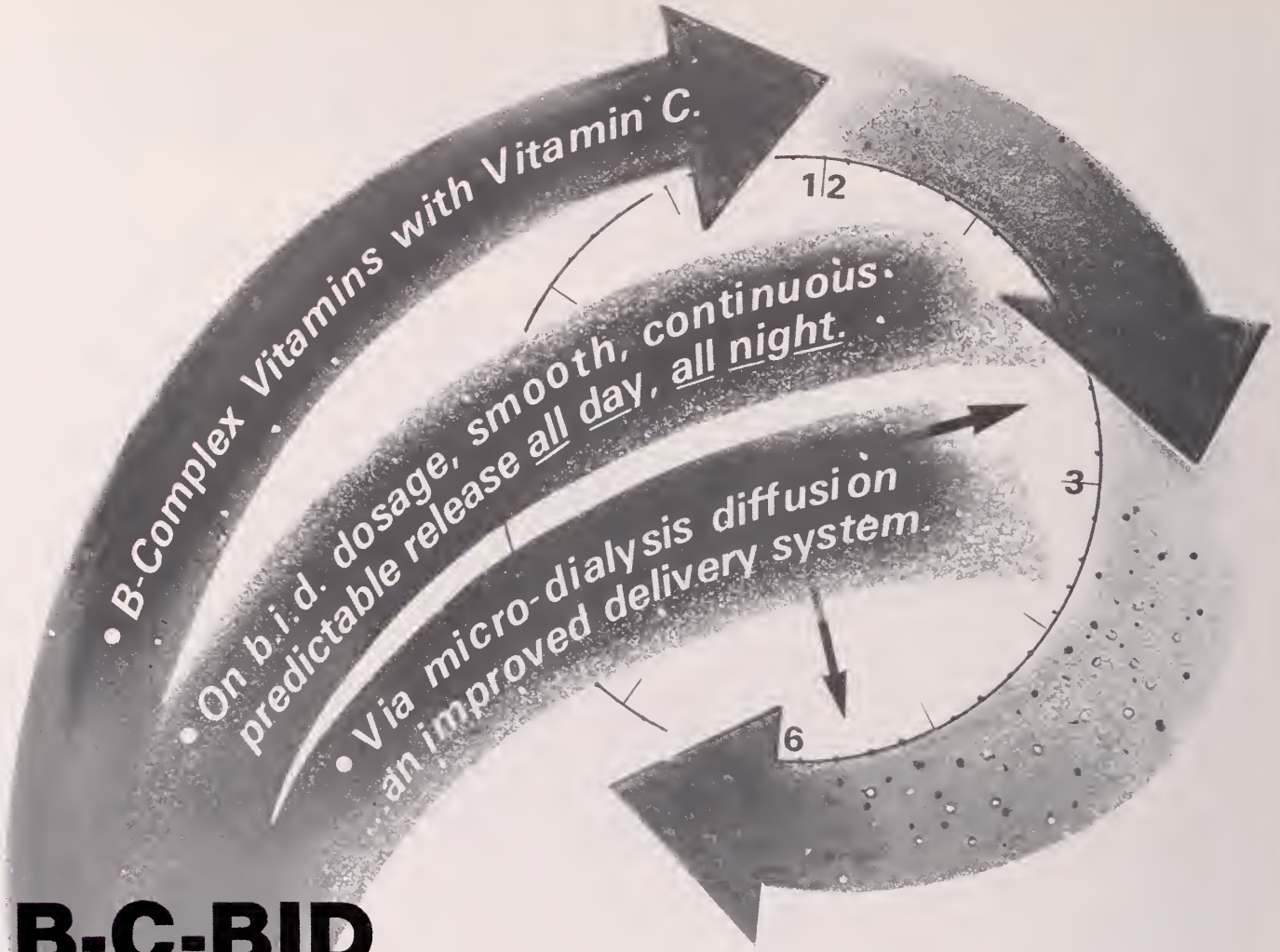
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The Special Issue on Learning Disabilities

It is with a deep sense of pride that I commend to your attention the special issue of *The Journal* devoted to "Learning Disabilities". This issue sponsored by the Florida Medical Association Auxiliary represents an integral part of the Auxiliary's activities in addressing learning disabilities (LD) as their Special Health Project for 1982-1983.

The Journal was indeed fortunate to have as Guest Editors Mrs. James Jude (Sallye) of Miami and Dr. Sylvia O. Richardson of Tampa. Mrs. Jude, a long time advocate of improved education for LD children, is the current Chairman of the FMA-A Learning Disabilities Health Project. Dr. Richardson is a nationally recognized authority in the field of learning disabilities. She has authored numerous publications including the well known, *Something's Wrong With My Child: A Parent's Book About Children With Learning Disabilities*. Because of her professional expertise and personal contacts, Dr. Richardson played a key role in the solicitation of appropriate material from acknowledged experts. Together, the Guest Editors and contributing authors have provided us with an excellent multidisciplinary review of current thinking about learning disabilities and associated problems.

Although the Special Issue will be particularly meaningful to parents with LD children, I would hope that all physicians utilize the opportunity to acquaint themselves further with this important subject. Certainly, the incidence of learning disabilities (at least 10% of children under age 18) and the possible consequences of inadequate recognition and treatment (psychological disturbances and inability to lead a productive life) justify active involvement by the medical profession. Even though the major part of treatment is usually educational, physicians in their practice should be able not only to detect a potential LD problem but also to offer guidance regarding medical evaluation, suitable testing, psychological counseling, available worthwhile educational facilities, and resource materials*. Without such medical guidance, parents and the LD child alike suffer increasingly from frustration and helplessness as the learning disability problem intensifies and becomes more complex with time. Given the latter circumstances, the family is especially vulnerable to fraudulent and expensive practices advertised as remedial and/or curative treatment for LD children. In the final analysis, early intervention (recognition of the LD problem and implementation of proper treatment) produces the best educational results and offers the most effective means of avoiding serious psychological difficulties.

Before closing, I wish to express my sincere appreciation and congratulations to the FMA-A, Guest Editors Sallye Jude and Sylvia Richardson, and contributing authors to the Special Issue. Your outstanding efforts have resulted in a highly significant contribution to the medical literature.

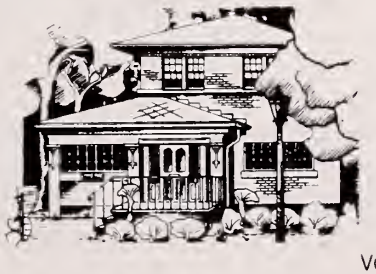
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* Parents may be referred to the Association for Children and Adults with Learning Disabilities (ACLD) for assistance and advocacy.

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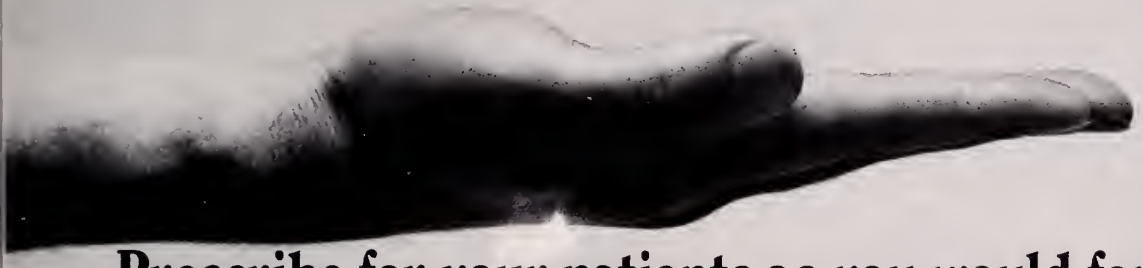
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FMA Auxiliary Special Issue on Learning Disabilities

Guest Editors:
Sallye Jude
Sylvia Richardson, M.D.

Introduction by Sallye Jude

On the matter of children who are learning disabled, I'm delighted that *The Journal of the Florida Medical Association, Inc.* is presenting these communications on learning disabilities. When my older children started school, there were no medical or educational resources in this field — even at Johns Hopkins where my husband was in training at the time. In helping the learning disabled child, the physician practices the highest art of medicine and directly benefits society.

Learning disabilities, dyslexia and minimal brain dysfunction are lightly used and much misunderstood terms. We are talking about a hidden handicap that affects eight to ten million children in the United States. These young people are average or above average in intelligence but can't live up to their academic potential. They often have inappropriate and negative behavior.

For physicians, their role in dealing with this handicap has not been clear. The lack of scientific testing and the 400 or more combinations of symptoms has unfortunately caused denial and disinterest by most of the medical profession. There is no simple medical formula, pair of glasses or exercise to cure the disability. The consequences of non-recognition and treatment are often more desperate than those caused by bacterial or viral infections. The untreated child becomes an emotionally malfunctioning person in a position to disrupt family life. He often becomes a social misfit who may turn to lawlessness because of his inability to fit into our social system. As he develops into a permanent emotional cripple or a social ward, the burden becomes an ongoing one for society.

If the physician will direct the parents to well-qualified resources, then an inter-disciplinary team of pediatrician, family physician, neurologist, psychological educator and social worker can, after a complete evaluation is done, diagnose the problem and prescribe a program to build on the strengths and compensate for the deficits of the individual child.

A disabled child means a disabled family. Parent education is imperative; blame and guilt must be dispelled. Because of the familial nature of the disability, more than one child in the family may be disabled and have completely varying symptoms. Interaction with siblings and peers often results in poor self-esteem. An emotional overlay may become the more serious problem during adolescence.

Educational courses in learning disabilities are still not required in Florida colleges for teacher certification. By state law, funding is mandated for special education classes for one percent of the population with learning disabilities, rather than the eight percent or more who need special attention. Frustration for parents occurs with this inequitable situation.

Early identification of the learning disabled child can reduce the impact of the disorder on the child, family and society. We can no longer cop out with terms "careless", "lazy", "immature" and "he'll out grow it". Awareness is imperative! We can't afford to be uninformed. We are talking about a major health problem. This issue of *The Journal* is devoted to increasing the awareness of the physician to the enormity of the disorder.

Introduction by Sylvia Richardson, M.D.

Learning disabilities encompass an incredible variety of problems gathered together under the same umbrella. They have been called "the most common and pervasive neurological problem among children."

Incidence figures of learning disabilities vary from one to forty percent of all children in the United State. Language disabilities alone — including speaking, reading and writing — are believed to involve five to fifteen percent of all children. Bear in mind that if one speculates conservatively that ten percent of all boys and girls under the age of 18 years have a learning disability, the total number would be seven and one

half million.[1]

Diagnosis and remediation of language and learning disabilities require the collaborative efforts of physicians, psychologists, speech-language pathologists and learning disabilities educational specialists. No single discipline can deal with the variety and number of problems involved. Yet the disciplines concerned with learning disabilities often have difficulty communicating with each other and with parents because of differences in terminology, methods of assessment, and management. Each tends to look at the child and his difficulties from a different perspective, usually dependent on his/her professional training and clinical experience and the age of his/her patient population, among other factors.

This overall group of disorders may be referred to as "minimal brain dysfunction," "specific learning disabilities," and less correctly "brain injured." The developmental dyslexias are an important facet of the problem, which also includes other deviations of language, intellect, and behavior.

In the following pages, the subject is addressed by a neurologist; a pediatrician; a child psychiatrist; a pediatric neurologist and pediatric fellow working in a multidisciplinary diagnostic and training program; a speech-language pathologist; the Florida State Consultants for the Speech and Language Impaired and for Specific Learning Disabilities; and the director of a school for adolescents with severe learning disabilities, most of whom were inappropriately managed in their earlier years.

Although the authors vary in terminology and reflect different points of view representing different frames of reference, you will note that there is agreement on several points:

1. Language disorders, learning disabilities and developmental dyslexias do exist, and in larger numbers than most professionals expect.
2. Individuals with disorders of spoken and written language comprise the majority of the learning disabled population.
3. The individual's performance today reflects the totality of his life experience. It depends upon the inherent genetic structure and endowment of his brain and intellect, upon the modifications of brain growth by illness or injury, upon appropriate modifications in his education, and upon the way his system has interacted with the emotional and perceptual stimuli to which he has been exposed.
4. Medical treatment or psychotherapy alone will not cure the learning disabilities. An appropriate educational or remedial program must be instituted as soon as possible. For example, most educators now agree that, for those with dyslexia, an appropriate program will use multi-sensory reinforcement, phonics, rules and generalizations, and a structured system progressing from the simple to the complex. However, educators must recognize and appreciate the vast diversity of intellects, and seek to provide for each child the teaching experience which is appropriate to his way of learning.
5. Physicians must be alert to the developmental deviations or delays in behavior, motor and/or language skills that often are clues to problem areas which may result in attention deficit disorders and/or learning disabilities. Early identification and intervention are imperative to prevent the devastating effects of failure, frustration, and impairment of self-esteem, which will prevent these children from realizing productive and fulfilling lives.

Dr. Richardson is Professor of Communicology, College of Social and Behavioral Sciences and is Clinical Professor of Pediatrics, University of South Florida School of Medicine, Tampa.

Reference

1. Brutten, M.; Richardson, S.O. and Mangel, C.: Something's wrong with my child. New York: Harcourt, Brace, Jovanovich; 1973.

Neurologic constructs of learning disabilities: the physician's role

Drake D. Duane, M.D.

ABSTRACT: Not uncommonly physicians are called upon to provide or comment upon assessment, diagnostic and therapeutic procedures relating to patient problems encountered in schooling (preschool through post-secondary). In order to respond appropriately, the physician should be knowledgeable in matters relating to school failure and especially to academic underachievement. Underachievement means performance below apparent capability in one or more academic areas. This article is a brief summary of the past and present role of medicine in determining and dealing with specific learning disabilities, with comments on terminology, neurologic theories of causation, clinical assessment, and management.

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Although some physicians and some referral agencies are uncertain of the contributions medicine may make to the field of learning disorders, the public is not. The American public expects leadership from medical researchers and practitioners in this area, and history supports this expectation.

Exceptionality in learning was first described by physicians in the 19th century. Wilde in 1853 described intelligent, non-deaf children with impoverished speech. Morgan in 1896 and Kerr in 1897 wrote of intelligent, sighted, hearing, speaking children and adolescents with striking inability to read and write despite school attendance.

Throughout this century, physicians from many countries have elaborated upon the phenomenon of reading and writing disability. This international recognition suggests that the problem is not a peculiarity of the American culture or the English language; and the diversity of specialties represented by the authors—otology, ophthalmology, pediatrics, psychiatry, and neurology—indicates that underachievement in use of language is not necessarily the purview of any one specialty in medicine.

The best epidemiologic investigation of reading underachievement was performed in the United Kingdom and was led by the British psychiatrist Michael Rutter. This work, referred to as the Isle of Wight Studies, confirmed the presence of statistically significant reading underachievement in four percent of the population of ten year olds having at least average intelligence. The statistical constraints were sufficiently rigid to make the above figure a minimum estimate of the prevalence of reading underachievement. Positive correlations with reading disability included history of delay in

speech, concomitant underachievement in spelling, similarly affected family members, and absence of overt neurologic disorder.

Vigorous contemporary research on the mechanisms underlying speaking, reading, and writing underachievement has been performed by neurologists, often in cooperation with psychologists and speech-language pathologists. The role of attention in learning has been addressed by pediatricians, psychiatrists, and neurologists, frequently in collaboration with psychologists. Clinical diagnostic services today usually provide access to each of the above specialties, yet appropriately center around and involve the family physician.

Testimony that educators believe that knowledge of the nervous system and collaboration with medicine are appropriate may be seen in the volume *Education and the Brain*, published by the National Society for the Study of Education in 1978. Likewise, non-medical organizations devoted to learning disorders usually include physicians on their boards of directors and meeting programs. The National Joint Committee on Learning Disabilities, which brings together six major non-medical organizations involved in learning disorders, currently includes two physicians among its membership of 18.

Thus, physicians—regardless of their area of practice—should appreciate that they have a strong tradition of involvement in language and learning disorders and that the public perception that there is a need of their continued contribution is widely recognized.

Terminology ● The plethora of terms to describe various kinds of educational underachievement is potentially confusing to physician and non-physician alike.

As mentioned, previously, reading was an early focus of medical investigators of underachievement. Initially the behavior was called "congenital word blindness" and "congenital symbol amblyopia." In the 1920's and 1930's an American neuropsychiatrist, Samuel T. Orton, selected the term "specific reading disability." However, as some of the students committed mirror-writing and many demonstrated lateral-spatial letter or word reversals (d, b, p, q; was, saw), he also coined the term "strephosymbolia" (twisted symbols).

The British neurologist Macdonald Critchley popularized the designation "specific developmental dyslexia" in the mid-20th century. In recent years, the notion of a pure syndrome of reading underachievement has been challenged with good evidence to support heterogeneity in the dyslexic population. Although "specific reading retardation" and "unexpected reading failure" have been proposed as alternatives, "dyslexia" remains a common term to describe reading underachievement. To distinguish between adult-onset acquired reading disorders and the childhood, apparently constitutional, reading disorders, "developmental dyslexia" —or, better still, "childhood dyslexia"—is commonly used by those in medicine, speech, and psychology. Two drawbacks of the term are its lack of acceptance by those in the field of education and the misconception that reading is affected in isolation. Mounting evidence supports the proposition that reading underachievement is invariably associated with deficits in spelling and expressing ideas in writing. Not uncommonly, the adult residual of childhood dyslexia is underperformance in accuracy of spelling, in rate and quality of written expression, and in mastering a second language. Additionally, there is reason to suspect a link between deficits in written language and difficulties in oral language—speaking (oral expression, articulation) and comprehension of speech. As a result, some refer to "specific language disability" and then describe the language skills affected.

By the mid-20th century, it was observed that some students failing in school were unusually restless and inattentive. This "hyperactivity," as it was called, had been described previously in other students who had suffered unequivocal brain insult, such as encephalitis or head trauma. As Dr. Karniski discusses in his article on page 257, the term "minimal brain damage" (MBD) came into use. Since many hyperactive children had no definite history of brain injury, the designation was soon altered to "minimal brain dysfunction" (retaining the MBD abbreviation).

There were two problems with the term MBD. First, some physicians equated MBD with hyperactivity, when more accurately one may or may not coexist with the other. Second, there was a tendency to employ the term as though it represented a specific entity. This is an unlikely probability when 99 different behaviors are encompassed within the MBD rubric. These criticisms do not invalidate the possibility that early cerebral insult may intrude upon a variety of educationally pertinent behaviors.

When federal legislation in 1970 and 1975 (PL:91-230; PL:94-142) was enacted to provide special education services for academically underachieving students, yet another term was chosen. However, the educational concept was influenced by what had preceded in medical nomenclature and theory. The legislated educational term is "specific learning disability." Work and Whitehurst discuss this in their article on page

Federal regulations in 1977 specified seven areas of underperformance by which students may qualify

as learning disabled: (1) oral expression, (2) listening comprehension, (3) written expression, (4) basic reading skills, (5) reading comprehension, (6) mathematical calculation, and (7) mathematical reasoning. A practical problem is that there is no statement in the law or regulations as to how much underperformance signifies a learning disability. An unfortunate consequence is that local school attitudes, finances, and available resources influence the selection of students for the special educational services. Although school agencies are not legally obligated routinely to seek or reimburse for medical expenses in the identification of a learning disability, a physician's report may be requested and taken into account in the process of selection for service.

Nothing in the federal law or regulations on learning disabilities pertains specifically to "hyperactivity" or attention-deficit disorders. But such disorders may affect academic performance secondarily or may coexist with a learning disability such as childhood dyslexia. Denckla has separated "dyslexia-pure" (isolated written-language underachievement) from "dyslexia-plus" (written-language underachievement coexistent with hyperactivity or other MBD disorders). Recent evidence indicates that school referral for potential special education service or for medical examination is more likely to occur when truculent behavior is a concern than when low performance occurs in isolation.

Neurologic hypotheses of causation • Each of the diagnostic labels referred to above has implied a central nervous system (CNS) cause. The most extensive medical research relates to the problem of reading underachievement (dyslexia). The applicability of that research to other learning disabilities is not clear, but it may have some relation to other language learning problems.

Areas of theoretical concern have been (1) whether the CNS disorder manifested in written language underachievement is acquired (perinatal stress) or constitutional (genetic); (2) whether it is due primarily to neuroanatomic (gross morphologic or cellular), neurophysiologic, or neurochemical mechanisms; and (3) whether the site of these alterations is cortical or subcortical, unilateral or bilateral. Since the population of dyslexics is not homogeneous, there may be more than one of these mechanisms producing the phenomenon.

These theoretical considerations are not without practical implications. The answers may influence diagnosis, prognosis, and treatment. One example is the proposition of maturational lag. Since the observed reading and writing behavior is reminiscent of that seen in chronologically younger students, perhaps the development of any of the above brain mechanisms is similarly immature. As a result, tincture of time might result in improved school performance. Although instances of seemingly spontaneous improvement do occur, there is sufficient data to suggest that reading retardation in intellectually competent elementary students does not usually disappear. Rather, the character of the underperformance may change with time.

There is some evidence for the concept of acquired childhood dyslexia, but it is circumstantial. Clinicians seldom can rely on birth history as a definite indication of cause. Constitutional factors, perhaps under genetic influence, are supported by two observations. First, the frequency of at least one similarly affected first-degree relative of identified dyslexic students is between 40 and 70%. Second, studies of monozygotic twins indicate 100% concordance with respect to reading underachievement. These data do not prove a genetic mechanism for each case. However, they do support the contention that, among the mechanisms resulting in dyslexic behavior, familial factors are prominent. No solitary mode of inheritance has yet been defined. Furthermore, genetic theories alone do not explain the disproportionate frequency of dyslexia in males (3:1). Nor does the sex-related difference in maturation rate explain this disproportion, which remains about the same in young adult dyslexics. It is probable that other biologic attributes of males, genetic influences, and birth trauma mutually reinforce the risk for dyslexic behavior.

One of the earliest hypotheses was based on the observations of acquired dyslexia in adults. It suggested unilateral—presumably left parietal—insult or malformation as the cause of childhood reading underachievement. However, applying the observations of acquired adult disorders to developmental disorders has obvious limitations. There has not yet been described a case of isolated dyslexia resulting from unilateral cerebral disease acquired in childhood.

Even early in life, the left hemisphere possesses physical and behavioral attributes which appear to endow it with language skill superior to that of the right hemisphere. Faulty language lateralization as a mechanism for reading failure was first suggested by Orton. Despite the high frequency of mixed eye-hand preference, left-handedness, or ambidexterity which Orton and others had noticed in this population, eye-hand-foot preference is an imperfect predictor of language lateralization in the brain. In isolation, right hand-left eye, or left hand-right eye preference is a weak correlate of reading failure. Furthermore, 30% of normal-achieving, intelligent school-age boys demonstrate mixed eye-hand preference.

A contemporary neuropsychologic hypothesis relates to the question of faulty language lateralization. The data used to support this notion suggest that dyslexic boys tend to rely on a presumably less

efficient whole-word visual analysis in reading, a practice presumed to reflect right hemispheric function.

A potential physical counterpart of the right-hemispheric thesis was suggested in a study of dyslexic males by computed tomography (CT) of the head. It appeared that dyslexics were more likely than the general population to have the right occipital-parietal pole wider than the left. A recent attempt to replicate that observation failed to confirm this so-called reversed asymmetry in childhood dyslexia. The radiographic finding is important because asymmetry of the superior temporal lobes has been demonstrated in autopsy studies. These showed that, among the general population, the left side has greater surface area in 65% and the right in 11%, with equality between the right and left in 24%. This structural asymmetry, already present prenatally, has been cited as a possible explanation of left hemispheric specialization for language. Perhaps the newer techniques of nuclear magnetic resonance (NMR) and positron emission tomography (PET) will clarify the asymmetry and other morphologic questions, including differences in myelination rate.

Some studies using electroencephalographic (EEG) derivatives referred to as averaged evoked potentials and power spectral analysis have revealed differences between dyslexics and non-dyslexics. The novel EEG technique, called brain electrical activity mapping (BEAM), in a small but carefully done study of dyslexic and non-dyslexic boys showed that the two groups were distinguished by greater slow-wave activity in the left posterior hemisphere and bilateral paracentral frontal slow waves. These observations, although not as yet clinically diagnostic, do reinforce the premise that dyslexics have abnormalities of brain function which are detectable by physiologic means.

Only recently has the brain of a deceased dyslexic come to gross and microscopic anatomic analysis. The investigation revealed cortical cellular dysplasias only in the left hemisphere. Additionally, bilateral subcortical abnormalities were observed in thalamic nuclei involved in speech and hearing. If such findings are confirmed in other cases, the CNS hypothesis for dyslexia may be proved. Of interest will be the constancy of such changes in light of the clinical diversity observed within the dyslexic population. Should a structural and physiologic substrate be documented, this may open a more direct avenue of medical intervention to supplement educational remediation.

Hypotheses that vestibular cerebellar mechanisms are involved in dyslexia are no more than unsupported speculation. The same may be said of nutritional and allergic hypotheses, which—if of any application—may relate to attention-deficit disorders rather than reading disorders.

Clinical assessment • When learning disorders are suspected, traditional medical assessment remains useful. The patient, family, and educational agency are reassured when the presence or absence of other health problems is clarified and treatment supplied if indicated. It is especially important to establish visual and auditory acuity. Among preschoolers, hearing problems not uncommonly escape parental detection. There is reasonable concern that intermittent hearing loss produced by recurrent otitis media in early childhood may have adverse effects upon speech and language development.

The conventional medical examination should be expanded to include a more detailed history of early language and motor development. The former is particularly important in the prediction of or correlation with disorders of speech production, speech comprehension, reading, and writing. Motor and social development correlate best with attention-deficit disorders. A family history of similar educational difficulties suggests risk, but alone it does not prove a learning disorder in individual patients.

School records and teacher comments are often revealing upon review by a neutral party. Description of poor effort may reflect student frustration with difficult tasks or poor attention rather than low motivation. Success in mathematics with failure in reading raises the question of selective underachievement, which occurs in dyslexia.

The style of instruction and testing will affect the quality of performance by students with a learning disability. Untimed written or oral examinations for some students may reveal previously unexpected strong performance. A student with slow, inaccurate reading ability characteristically underperforms on group-administered, timed, written achievement tests such as the California Achievement Test and Iowa Test of Basic Skills. Yet in a supportive personal interview, this same student may appear loquacious, well informed, and witty, suggesting at least average intelligence. Hobbies and interests may reveal an inquiring mind and social skills not reflected in the school report card. Despite a failing grade in English, the student who has patented a computer program may not be a dullard.

A screening neurologic examination includes some sense of mental status, speech, reading, writing, and arithmetic as well as reflexes and coordination. So-called soft neurologic signs have better correlation with hyperactivity than with academic skill. Restless learners are frequently placid in the physician's office. As a consequence, attention-deficit disorder is best supported by parent-teacher questionnaires such as the Conners Rating Scale or Achenbach Child Behavior Checklist. Derivatives

from the Wechsler Intelligence Scale for Children, such as the freedom-from-distractibility factor, when disproportionately reduced, support the presence of attentional difficulties. A sensitive ear, pencil and paper, and a few written materials are invaluable resources for the examiner. The student's own texts may be used to sample arithmetic and oral as well as silent reading. At least qualitative and semiquantitative assessment of reading fluency and comprehension may be gained by use of a paragraph or two of the graded two-page Gray Oral Reading Test and a stopwatch. Spelling, penmanship, and written expression can be sampled by having the student write spontaneously and to dictation, incorporating words and structures heard in the student's speech (Fig. 1).

Before any definite conclusions are drawn, individually administered tests of intelligence, academic skill, and language are required. Disparity between academic aptitude (IQ) and achievement must be present if the designation "specific learning disability" is applied. Overall, evaluation of dyslexics requires the coordinated assistance of trained, experienced, and sensitive colleagues in psychology, speech and language, or special education.

EEG or CT studies, or both, are medically indicated only when the history or examination raises the question of seizure disorder or structural brain disease. However, parental concerns should not go unheeded; and they may be more readily assuaged when negative results from such studies are obtained.

Medical treatment • Treatment begins with a clear statement to the patient and family as to the nature of the problems, the treatment options, and the desirability of sharing the results of assessment with the school. Professional jargon and disease models should be minimized. Once vision, hearing, and general health issues are settled, there remains the unique responsibility of the physician to initiate, direct, or discourage medical treatment.

Stimulant therapy is clearly appropriate when attention-deficit disorder is suspected, either alone or coincidental with a specific learning disability. Evidence points to improved attention in more than half of treated cases. Academics, basic skills, and study habits will benefit to the extent that the attentional problem has interfered with them. As Dr. Karniski points out, dose adjustment requires continuing reports from school and home. The student may be of help, too, but frequently he cannot describe a specific effect from stimulant treatment. This may be one reason for the low incidence for stimulant-drug abuse by these patients. It should be

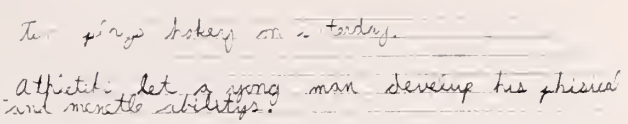


Fig. 1. Writing sample from a boy 12 years 9 months old. He is in sixth grade; right-handed, right-eyed; white, upper middle class; well-adjusted emotionally, skillful athletically, and well-spoken.

Upper line was written spontaneously: "Tim plays hockey on Saturday." Lower line was written to dictation: "Athletics let a young man develop his physical and mental abilities."

Verbal IQ 86, performance IQ 106, perceptual factor derived from IQ test 110-115. Reading level grade 4.9, spelling level grade 3.6, arithmetic grade 7.5.

Student had been retained in kindergarten. No special services had been provided by school. Family history: younger brother with similar difficulty.

DSM III diagnosis: developmental reading disorder or childhood dyslexia.

stressed that medical intervention does not replace educational remediation.

School personnel and families may inquire about lay reports of alternative forms of treatment for reading disorders. Among these are piracetam (a drug used in Europe for dementia) and antivertigo and antihistamine therapies. The dispassionate answer is that there is no objective proof as yet that any of these agents positively affects reading disability. Ocular motor training alone is without merit for written-language disorders. For attention-deficit disorders, there is no convincing evidence that dietary restrictions or vitamin supplements hold any advantage over stimulant therapy.

As the conscientious physician seeks sound consultation in medical areas outside his area of expertise, he should do the same in regard to educational treatment. The physician must develop a sense of the effectiveness of local, public, and private education resources. If these are deficient, the good doctor advocates their enhancement for the sake of his patient as he would advocate the best in medical care. The known prevalence of health problems affects their priority. The prevalence of learning disabilities exceeds the combined frequency of cerebral palsy, mental retardation, and epilepsy. The medical profession is not without influence in society, and it should exert that influence with informed, compassionate vigor in behalf of its many patients who suffer from learning disabilities.

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References

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (DSM-III). Third edition. Washington D.C., American Psychiatric Association, 1980.
2. Benton, A.L. and Pearl, D. ed.: Dyslexia. An Appraisal of Current Knowledge. New York, Oxford University Press, 1978.
3. Clements, S.D.: Minimal Brain Dysfunction in Children: Terminology and Identification (NINDB, Monograph No. 3, Public Health Service Publication No. 1415). Washington D.C., U.S. Department of Health, Education, and Welfare, 1966.
4. Denckla, M.B. and Rudel, R.G.: Anomalies of motor development in hyperactive boys. Ann Neurol 3:231-233, 1978.
5. Duane, D.D.: Underachievement in written language: auditory aspects. In: Progress in Learning Disabilities. Vol 5. Edited by H.R. Myklebust. New York, Grune & Stratton, 1982, pp 177-206.
6. Duffy, F.H., Denckla, M.B.; Bartels, P.H. and Sandini, G.: Dyslexia: regional differences in brain electrical activity by topographic mapping. Ann Neurol 7:412-420, 1980.
7. Finucci, J.M.: Genetic considerations in dyslexia. In: Progress in Learning Disabilities. Vol 4. Edited by H.R. Myklebust. New York, Grune & Stratton, 1978, pp 41-63.
8. Galaburda, A.M. and Eidelberg, D.: Symmetry and asymmetry in the human posterior thalamus. II. Thalamic lesions in a case of developmental dyslexia. Arch Neurol 39:333-336, 1982.
9. Orton, S.T.: Reading, Writing and Speech Problems in Children: A Presentation of Certain Types of Disorders in the Development of the Language Faculty. New York, W.W. Norton & Company, 1937.
10. Rutter, M.; Tizard, J.; Yule, W.; Graham, P. and Whitmore, K.: Research report: Isle of Wight Studies, 1964-1974. Psychol Med 6:313-332, 1976.

Attention deficit disorder
A guide for the practitioner

Walt Karniski, M.D.

ABSTRACT: The child with Attention Deficit Disorder has an intrinsic inability to selectively focus attention, resulting in a short attention span, impulsivity and excess motor behavior. Diagnosis is made primarily by history from parents and teachers. The physical examination, standardized questionnaires, medication trials, and educational evaluations are aids used in making the diagnosis. Although etiology is currently unknown, a deficiency of CNS monoamine neurotransmitters is postulated. Treatment consists of a triad of stimulant medication, special education and counseling. The most common side effects of medication are anorexia and insomnia, both of which are dose related. Growth suppression is probably related to anorexia and is temporary. A close relationship between the physician and the school is essential to assist in diagnosis and to help monitor response to medication.

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Attention Deficit Disorder (ADD) is a complex[1] but relatively consistent collection of symptoms that has been described and defined by a confusing mass of literature. One recent review[2] cites over 400 studies of the effects of medication on children with this syndrome alone. Much more is published in the child development, psychology, educational and medical literature. It is not the purpose of this article to review all of it. Rather, an attempt will be made to summarize the issues relevant to the physician who is faced daily with the evaluation and treatment of children with this disorder.

Terminology • There have been at least 35 terms used in the literature to describe the symptom complex now known as ADD. Minimal Brain Damage was one of the earlier terms[3] coined because children with excess motor activity and behavior problems were noted to have many of the subtle neurologic signs seen in patients with structural brain damage, but without any of the "hard" signs pathognomonic of brain disease. The term is no longer used due to the fact that such brain damage has not been demonstrated in children with ADD. It was replaced by the term Minimal Brain Dysfunction[5,6] primarily because it emphasizes the dysfunction of the cerebral cortex, without addressing etiology. Although the reference to "function" is preferable to "damage," the word "minimal" is somewhat distasteful when one becomes aware of the ubiquitous range of dysfunction in the child's life. The terms "hyperkinesis" and "hyperactivity" are even less desirable, for they emphasize only one facet, the excess motor activity, of a syndrome which also includes problems with attention and

Figure 1. Diagnostic criteria for Attention Deficit Disorder with hyperactivity

A. Inattention. At least three of the following:
 1. Often fails to finish things he or she starts.
 2. Often doesn't seem to listen.
 3. Easily distracted
 4. Has difficulty concentrating on schoolwork or other tasks requiring sustained attention.
 5. Has difficulty sticking to a play activity.

B. Impulsivity. At least three of the following:
 1. Often acts before thinking.
 2. Shifts excessively from one activity to another.
 3. Has difficulty organizing work.
 4. Needs a lot of supervision.
 5. Frequently calls out in class.
 6. Has difficulty awaiting turn in games or group situations.

C. Hyperactivity. At least two of the following:
 1. Runs about or climbs on things excessively.
 2. Has difficulty sitting still or fidgets excessively.
 3. Has difficulty staying seated.
 4. Moves about excessively during sleep.
 5. Is always "on the go" or acts as if "driven by a motor."

D. Onset before the age of 7.

E. Duration of at least 6 months.

F. Not due to Schizophrenia, Affective Disorder, or Severe or Profound Mental Retardation.

Diagnostic and Statistical Manual of Mental Disorders (3rd ed.). Washington, D.C.: American Psychiatric Association, 1980.[2]

impulsivity. Although the most appropriate term will probably not be realized until the full etiology is determined, Attention Deficit Disorder is currently the accepted diagnostic label. (Fig. 1).

Clinical methods for diagnosis ● Although there is not total agreement as to the diagnostic criteria for ADD, many clinicians and researchers have begun to accept the criteria established by the American Psychiatric Association in 1980. ADD is characterized by problems in three major areas: attention, impulsivity, and hyperactivity.

The inattention seen in ADD is primarily a disorder of "selective attention." The primary problem is not that the child is unable to attend to what is going on. As a matter of fact, observation of these children demonstrates that they seem to attempt to attend to everything, unable to focus their attention on the most pertinent activity at any moment. Such a child is unable to filter out distractions, so that the low hum of an air conditioner or the sound of cars outside seem as significant as the sound of the teacher's voice. Thus, the distractability, impulsiveness, and even the hyperactivity are only secondary to the inability to attend selectively.

Children with ADD show variable abilities to attend and control excess motor activity, dependent on the situation. In the physician's office, many children can sit quietly while the physician takes a short history and performs a brief physical exam. It has been shown that the physician is unable to accurately diagnose ADD if impressions are based solely on observations of the child's behavior in the office[8].

Thus, a critical part of the diagnosis relies on history. Conners[9-11] has standardized the history through behavioral inventories given to parents and teachers. Each inventory consists of questions answered on a 0 to 3 scale, with a higher number indicating a more frequent occurrence of that problem. The Hyperactivity Index consists of the ten most sensitive questions discriminating between a child with ADD and a child without. A score over 15 is highly suggestive of the diagnosis of ADD[12]. Many other rating scales have been used[2], but Conners' scale is a well researched screening device that is easily used in the physician's office.

Hospital admission has also been used as a diagnostic approach[13]. During the admission, the child is tested both on and off medication in a double blind fashion to determine its efficacy. The advantage of such an approach is that medication response is determined in a single day. The disadvantages include the need for specially trained staff, the expense and the difficulty in generalizing to non-hospital situations. A response to medication in the hospital—in a structured, one-to-one setting—does not mean that the child will respond in a school or home setting. Furthermore, any measurable response to medication may not, in itself, be diagnostic of ADD. There is evidence[14] to indicate that normal children without ADD also show an initial, temporary response to a single dose of medication.

An alternate approach is the use of an outpatient medication/placebo trial. At All Children's Hospital in St. Petersburg, Florida, we have been using such a trial to aid in the medication management of children with ADD. Each of the three stimulant medications is used for one week, alternating with a placebo, over a six week period. Parents and teachers fill out behavior rating scales at the end of each week. At the completion of the six week period, the behavior scales are computer analyzed allowing the examination of a number of subscales relating to attention, impulsivity, behavior and side-effects. This objective assessment of medication response is not only helpful to the

physician in deciding whether or not to use medication, but it is often convincing evidence to the parents and teachers of the efficacy of medication.

The educational assessment • Although the term Minimal Brain Dysfunction has been used by many physicians synonomously with Learning Disability[15], as Dr. Duane has pointed out on page 252, the same mistake should not be made with Attention Deficit Disorder. It is important to be aware that in some children ADD occurs in relative isolation, without a learning disability. This "pure" state is usually seen in the younger child, before the devastating effects of deficiencies in attention have interfered with his academic success. Once this has occurred, academic difficulties secondary to inattention can mask as a learning disability. In other children, however, ADD will co-exist with a primary learning disability. Thus it is essential that all children with ADD receive an educational evaluation to rule out an accompanying learning disability. Such an evaluation can also assist in the diagnosis of ADD. Again, close communication between the physician and the school is essential.

The physical examination • Numerous studies[16-19] have demonstrated that certain neurologic signs are present to a greater extent in the child with ADD. These signs are considered to be "soft", "minor", or "subtle", to distinguish them from the more classical "hard" neurological signs. However, the clinical significance of these findings is uncertain. The presence of such signs is an indicator of neurological involvement and should not be ignored, but they are not diagnostic of ADD. When present, they support the history and make the diagnosis more likely.

Etiology • The etiology of ADD is essentially unknown. Although most investigators suspect an organically based dysfunction of the CNS, conclusive evidence does not yet exist. Shaywitz, et al[20] have summarized the current evidence implicating disorders of monoamine neurotransmitters. A deficiency of CNS dopamine is the hypothesized mechanism. Other neurologic models have been proposed[21] but are only partially substantiated.

One proposed "cause" of ADD bears special mention. In 1975 Feingold[22] proposed that food additives and naturally occurring salicylates result in hyperactivity and learning disabilities. When initially proposed this hypothesis was not taken seriously, but it now appears that in a subgroup of children symptoms of hyperactivity may be caused by or exacerbated by food dyes. At the present time there is no reliable method for identifying this subgroup short of challenge trials. Furthermore, stimulant medication is probably more effective in treating these children than the Feingold diet (a diet without food additives and salicylates).[23-26]

Treatment • Various treatments are used by physicians, educators and psychologists for the child with ADD. While each case must be tailored to the needs of the individual child and family, the mainstay of treatment is a coordinated program of stimulant medication, special education, and counseling for the family and child. Studies have supported the beneficial synergistic effects of this triad.

Although the pediatrician is primarily involved in diagnosis and medical treatment of the child with ADD, he or she must become familiar with the educational and psychological facilities in the community. This often requires participation at school staffings.

This is a time-consuming task, but is of the utmost importance for two reasons: (1) It allows the physician the opportunity to explain the probable organic nature of ADD to the individuals involved in the child's daily education. Although psychological problems such as diminished self-concept and impaired parent-child interaction are almost always present to some degree, it is critical that they are seen as secondary to ADD, and not primary. The problems may still be present, and they must be treated; however, this approach has the added benefit of absolving both the parents and the child from guilt, but not from responsibility. (2) The school staffing is a valuable source of information to the physician, providing knowledge about this child and family that might affect significantly the medical treatment. Furthermore, attendance at the staffing is a demonstration that the physician sees the teachers' input as of paramount importance in establishing the effectiveness of medication.

Many excellent sources are available to the physician that detail the educational and psychological techniques for treatment[2,27-29] and should be consulted for more specific information. But with these caveats in mind, and with a strong understanding that medication is not the only treatment for ADD, the remainder of this article will serve as a guide for the use of stimulant medication for ADD.

The specific medications and dosage • Research documenting the effectiveness of stimulant medication for the treatment of ADD is voluminous [2,14,30,31]. Improved attention, behavior, hand writing, reflexes, classroom performance, self-concept and socialization have been well documented. Unfortunately, good, long-term, randomized follow-up studies are lacking.

Only three medications have been shown to be effective in the treatment of Attention Deficit Disorder: methylphenidate (Ritalin), dextroamphetamine (Dexedrine), and pemoline (Cylert). Other medications have been used, including tricyclic antidepressants, phenothiazines, diphenolhydantoin, and antihistamines. None of these have been shown to be as effective as the stimulants, and most are completely ineffective in the treatment of ADD. They may produce some decrease in motor activity through sedation, but positive effects on attention or learning have not been proven, so that the use of these other medications is not recommended.

There is indication that the stimulants may have optimal effects on selective CNS functions at different dosages[32,33]. As dosage increases, behavior improves proportionately; however, the beneficial effects of methylphenidate on learning seem to peak at approximately 0.3 mg/kg and diminish at higher doses. This highlights the importance of the physician's role in the overall management of the child. The physician cannot rely on statements from the parents or the teachers that "Johnny is getting better." It is essential that the child's attention, classroom participation, socialization, impulsivity, and self-concept be periodically monitored, in addition to activity.

Methylphenidate should be started at an approximate dose of 0.3 mg./kg. at least twice a day. Because of its relatively short half-life, the effects of a morning dose will have abated by early afternoon in most children. A second dose can be administered by the school at noon. A third dose is often necessary in the late afternoon. Occasionally, if the dosage is small, a fourth dose can be administered, but the insomniac side-effects usually prevent this. A long-acting preparation of Ritalin has recently been released, and should prevent the multiple doses and school administered doses often seen as a drawback to its use.

Dextroamphetamine is often started at one-half the dose of methylphenidate, but many clinicians use equivalent dosages. It is also available in a long-acting capsule (Dexedrine Spansules), and when administered this way a single dose is usually sufficient. If a second dose is needed later in the day, the tablets should be used, with their shorter half-life, so as to prevent the increased possibility of insomnia.

Although the manufacturer recommends starting pemoline at 37.5 mg., and then increasing by 18.75 mg. to a maximum of 112.5 mg., this approach is inappropriate in pediatric patients, since the child's size or age is not taken into account. As an alternative, I use approximately 1.1 mg./kg. in a single morning dose. This dose can then gradually be increased, but exceeding 4 mg./kg. is usually not necessary. Although it is thought that it often takes one to two weeks to see a response to pemoline, clinical experience has often shown significant beneficial effects within 24-48 hours. Pemoline has a reported half-life of approximately eight hours, and a single dose per day is often sufficient. Occasionally a second, smaller dose is needed in the early afternoon.

Side-effects • The most frequent side-effects of stimulant medications are insomnia and anorexia[2]. They are more frequent with dextroamphetamine, less so with methylphenidate, and relatively infrequent with pemoline.

Appetite is usually normal at breakfast, prior to the onset of the morning dose, but can be reduced at noon. In younger children who have had significant problems sitting still at mealtime prior to starting medication, the amount of food consumed can increase, simply due to their ability to stay seated throughout the meal.

Growth suppression has been documented with the use of all three medications[34,37]. Although pemoline may affect cartilage metabolism, and dextroamphetamine and methylphenidate seem to stimulate growth hormone release, the major effect on growth suppression appears to be due to anorexia. Both the anorexia and growth suppression are dose related. Furthermore, rebound or catch-up growth occurs after discontinuing medication, or when drug holidays (weekends and summers) are used. Research has shown that catch-up growth occurs after a child has been on medication for a few years even without stopping the medication. Final adult stature does not appear to be affected by the long-term use of medication at recommended doses.

The insomnia that results is also dose related, but will often abate a few weeks after the medication is started. Therefore, if an effective dose is found, and insomnia occurs, the dose might be reduced for a short period of time, then increased later to the initial dose. If the insomnia is not severe, the parents may be asked to wait a week or two before dose reduction to determine if it will remit spontaneously.

Ritalin has a tendency to inhibit the metabolism of many drugs, including anticonvulsants, tricyclic antidepressants and anticoagulants. Ritalin may also exacerbate a preexisting tic, and in some children the resulting tic will be irreversible. Therefore, stimulant medication should be used cautiously or not at all in children with a history of tics.

Although drug dependence is seen in adults, especially with dextroamphetamine, it is not seen in children with usual ADD dosages, and the medication can be discontinued without harmful effects, even after many years. Parents express concern that

the use of these medications may increase the likelihood of drug abuse later. However, one study indicates that children who have been on medication for ADD actually may have a decreased tendency towards drug abuse, when compared to other children with ADD who are not treated. One might postulate that success in school and the improved self-concept that comes with successful treatment of ADD, might significantly diminish the psychological need to become dependent on drugs.

Discontinuing medication ● Coincident with the onset of puberty, many children with ADD will show a significant reduction of "hyperactive" symptoms. This observation leads to the notion that ADD is a developmental disturbance that the child "grows out of." Although randomized, long-term follow-up studies are unavailable, current follow-up studies indicate continuing difficulty with attention in these children when they become adults. Therefore, the attenuation of the restless motor symptoms is not, in itself, an indication for discontinuing stimulant medication. There is an increasing tendency to continue treatment for longer periods of time, often through high school. This is another important reason for the physician to maintain communication with the teachers. The child could be tried off the medication for a few weeks, and then the physician should contact the school to determine the effect of the discontinuation of medication. An alternative approach would be to use a medication/placebo trial as previously described.

Stimulant medication has been shown to be an effective treatment for ADD when used in combination with special education and counseling. Active monitoring of growth, sleep patterns, behavior and academic performance by the physician is essential.

References

1. Levine, M.D. and Oberklaid, F.: Hyperactivity: symptom complex or complex symptom? Am. J. Dis. Child, 134:409, 1980.
2. Barkley, R.A.: Hyperactive Children: A Handbook for Diagnosis and Treatment Guilford Press, New York, 1981.
3. Strauss, A. and Lehtinen, L. Psychopathology and Education of the Brain Injured Child Grune & Stratton, New York, 1947.
4. Reitan, R.M. and Boll, T.J.: Neuropsychological correlates of minimal brain dysfunction. Annals N.Y. Acad Sci. 205.65, 1973.
5. Wender, P.: The minimal brain dysfunction syndrome in children. J. Nerv. Ment. Dis. 155:55, 1972.
6. Clements, S.D. and Peters, J.E.. Minimal brain dysfunction in the school age child. Arch. Gen. Psychiat. 6:185, 1962.
7. Diagnostic and Statistical Manual of Mental Disorders (3rd ed.), American Psychiatric Association, Washington, D.C., 1980.
8. Sleator, E.K. and Ullman, R.K.: Can the physician diagnose hyperactivity in the office? Pediatrics 67:13, 1981.
9. Conners, C.K.: Symptom patterns in hyperactive, neurotic and normal children. Child Dev. 41:667, 1970.
10. Conners, C.K.: A teacher rating scale for use in drug studies with children. Am. J. Psychiatr. 126:884, 1969.
11. Goyette, C.H.; Conners, D.K. and Ulrich, R.F.: Normative data on revised Conners' parent and teacher rating scales. J. Abnor. Child Psychol. 6:221, 1978
12. Sprague, R.L.; Cohen, M.N. and Werry, J.S.: Normative data on the Conners' Teacher Rating Scale and Abbreviated Scale. WHO Tech. Rep Ser. 18909 NIMH, 1974
13. Swanson, J.; Kinsbourne, M.; Roberts, W. and Zucker, K.: Time response analysis of the effect of stimulant medication on the learning ability of children referred for hyperactivity. Pediatrics 61:21, 1978.
14. Rapoport, J.L., et. al.: Dextroamphetamine: Its cognitive and behavioral effects in normal and hyperactive boys and normal men. Arch. Gen. Psychiatr. 37:933, 1980.
15. Denkla, M.B.: Minimal brain dysfunction. In: Education and the Brain. The National Society for the Study of Education, p.224, 1980.
16. Werry, J.S., et. al.: Studies on the hyperactive child—VII. Neurological status compared with neurotic and normal children. Amer. J. Orthopsychiatry 42:441, 1972.
17. Hertzig, I.M., Bortner, M. and Birch, H.: Neurologic findings in children educationally designated as "brain damaged." Am. J. Orthopsychiatry 39:437, 1969.
18. Adams, R.M.; Kocsis, J.J. and Estes, R.E.: Soft neurological signs in learning disabled children and controls. Am. J. Dis. Child 128.614, 1974
19. McMahon, S.A. and Greenberg, L.M.: Serial neurologic examination of hyperactive children. Pediatrics 59.584, 1977.
20. Shaywitz, S.E.; Cohen, D.J. and Shaywitz, B.A.: The biochemical basis of minimal brain dysfunction. J. Pediatrics 92:179, 1978
21. Rapoport, J.L. and Ferguson, H.B.: Biochemical validation of the hyperkinetic syndrome. Develop. Med. Child Neurol. 23:667, 1981.
22. Feingold, B.: Why Your Child is Hyperactive. New York, Random House 1975.
23. Conners, C.K., et. al.: Food additives and hyperkinesis: a controlled double-blind experiment. Pediatrics 58:154, 1976.
24. Swanson, J.M. and Kinsbourne, M.: Food dyes impair performance of hyperkinetic children on a laboratory learning test. Science 207:1485, 1980.
25. Weiss, B., et. al.. Behavioral response to artificial food colors. Science 207:1487, 1980.
26. Harley, J.P., et. al.: Hyperkinesis and food additives: testing the Feingold hypothesis. Pediatrics 61:818, 1978
27. Dubey, D.R. and Kaufman, K.F.: Home management of hyperkinetic children. J. Pediatr. 93:141, 1978.
28. Wolraich, M.L.: Behavior modification therapy in hyperkinetic children. Clinical Ped. 18:563, 1979.
29. Wahler, R.G.: Oppositional children: a quest for parental reinforcement control. J. Applied Behav. Analysis 2:159, 1969
30. Whalen, C.K. and Henker, B.. Psychostimulants and children: a review and analysis. Psychol. Bull. 83.1113, 1976.
31. Sprague, R.L. and Sleator, E.K.: Effects of psychopharmacologic agents on learning disorders. Ped. Clin. N. A. 20:719, 1973.
32. Sprague, R. and Sleator, E.: Methylphenidate in hyperactive children: Differences in dose effects on learning and social behavior. Science 198.1274, 1977.
33. Brown, R.T. and Sleator, E.K. Methylphenidate in hyperactive children. Differences in dose effects on impulsive behavior. Pediatrics 64.408, 1979
34. Gross, M.D.. Growth of hyperkinetic children taking methylphenidate, dextroamphetamine or imipramine/desipramine. Pediatrics 58:423, 1976.
35. Safer, D.J.; Allen, R.P. and Barr, E.. Depression of growth in hyperactive children on stimulant drugs. NEJM 287:217, 1972.
36. Safer, D.J.; Allen, R.P. and Barr, E.: Growth rebound after termination of stimulant drugs. J. Pediatr. 86:113, 1975.
37. Friedmann, et. al.: Effect on growth in pemoline treated children with ADD. Am. J. Dis. Child. 135:329, 1981.

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Psychiatric implication of learning disabilities

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ABSTRACT: The emotional and behavioral reactions of a child with a learning disability stem from a basic neuropsychological immaturity in the functions of spatial orientation and temporal organization. This distorts body image orientation in space and creates confusion in time. How the individual copes with these distortions is a function of the cause and severity of the learning disability, his temperamental and intellectual endowment, and the nature and quality of parental and educational support the child receives. All children with learning disabilities, however, experience repeated failure and frustration, with impairment of their own self esteem. The resulting psychiatric picture may run the gamut of emotional and behavioral disability ranging all the way from withdrawal, school refusal, somatization, regression, and depression on the one hand, to aggression, negativism, projection, clowning on the other. In the adolescent, after years of failure, truancy, sexual and aggressive acting out are the rule. Poor peer and sexual adjustment, and vocational failure may be the end results of a learning disability. Parents, too, react to the child's failure in varied ways: denial, depression, guilt, projection of the blame to child and school, and resentment of the reality problems created by the learning disability. The destructive influence of learning disability may be interrupted by early diagnosis before the child has failed and by appropriate intervention.

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The child with a learning disability does not leave his psychiatric problems in the classroom. He carries them home, into his relations with parents and peers; they pervade the adjustment of the adolescent and reach into the social, emotional, and vocational adjustment of the adult. If untreated, learning disability is a long term problem, the effects of which may be found throughout life. This is an important concept. Unless adequately and appropriately treated, the child will not outgrow his disability; he may compensate for it, but he will not outgrow it. How the individual adjusts to a learning disability however, what emotional and behavioral defensive patterns he develops, depends upon a multitude of factors including: the cause, extent, and severity of his disability; the temperamental and intellectual endowment with which he was born; the presence of complicating factors such as hyperactivity, attentional deficits, problems in fine and/or gross motor coordination; and, most important, the adequacy and appropriateness of the support the child receives from parents and school.

Common problems • While the psychiatric reaction to learning disability is thus an idiosyncratic response, there are certain common problems with which all children with learning disability must cope. These problems deal with "deviant performance in perceptual, linguistic, sequencing, and intersensory integrative abilities"[1]. The varied perceptual deviance may be reduced to a unified concept as a basic immaturity in spatial orientation and in temporal organization[2], an immaturity in the concepts of space and time and the inability to perceive accurately symbols in space and sounds in time. Clinically, this may be found in the visual field as difficulty with the visual discrimination and recall

of asymmetries, as specific verticalization and angulation difficulty in visual motor function, and as difficulty in separating figure from ground. In the auditory field, it may be found as problems in the temporal sequencing of sounds to make words, words to make sentences, sentences to make coherent thoughts, and, at a higher level, the capacity to store sequences of words, phrases, and even thoughts; in the body image area as difficulty with orientation of the body in space, as in right-left discrimination, praxis, and finger gnosis. Thus, a basic problem with which LD children must cope are all combinations of dysgnosias, dysphasias, and dyspraxias which relate to space and time.

While these skills are basic to learning, they also form the hierarchial steps needed for more advanced skills. Delay in temporal sequencing, for example, leads to a difficulty in the storage of sequences. As a result, there must occur lacunae in the retrieval of information at a higher level, particularly in associated concepts and ability to generalize; problems with word finding; the presence of expressive reversals; difficulty in organizing tasks, planning projects, scheduling and establishing priorities, organizing and sequencing ideas. Persistent problems in spatial orientation are seen in concepts of distance, map reading, difficulty in telling time or being aware of time sequences, difficulty in understanding non-verbal communication, gestures and facial expression. Praxic difficulty may be viewed as clumsiness.

Child's sense of identity • The academic disability itself thus is but the tip of the iceberg, the result of a more basic neuropsychological dysfunction in the central nervous system in which the child's sense of his own identity may be involved. Piaget has stated that reality is constructed out of one's multimodal contact with the external world. The child with confusion in spatial orientation and temporal organization must perceive reality in a distorted frame. His construction of the world is distorted, and if to this distortion we add immaturity in right-left discrimination, praxis, and finger gnosis, the concept of his own body image in relation to the world must also be askew.

Problems in body image, the image which the child has of his own body in space and time, have, as we have indicated, a physiological base. The child with learning disability, however, is not exempt from the emotional problems of growing up with which all children must cope. The problem here is that his biological substrate is different, his neuropsychological apparatus immature, his vulnerability to anxiety increased. Our task is to understand how this biologic difference influences his feelings, thoughts, and behavior—that there are emotional reactions to the real problems created by the learning disability. In the 1940's[3], it was popular to ascribe learning failure to emotional blocks in the child, that the learning failure was secondary to emotional problems. Our concept now is that the neuro-psychological immaturities found in children with learning disabilities are primary and that the emotional problems, for the most part, are secondary.[4] This concept has practical importance in management. Psychotherapy alone will not cure the learning disability.

The LD child's problems may be apparent in pre-school and in kindergarten. Here his visual-motor difficulties are seen in inability to copy even a circle, to color within lines; he may not be able to recognize asymmetric letters, tell a coherent story, understand directions. The pattern of failure and frustration thus is set very early; school becomes a confusing and perhaps a painful experience, something to be avoided by refusing to leave mother, crying, complaining of stomach aches or, on the other hand, passively accepted by going to school but, while there, simply withdrawing, regressing, much like the "learned helplessness"[5,7] of animals who after repeated electric shocks—given while they cannot escape the shocks—fail to initiate responses to escape the shocks when they are freed. Other children in the pre-school classes may become actively aggressive, clowning, disobedient, negativistic.

Frustration in elementary school • The patterns established in the pre-school years are intensified and aggravated in the elementary grades when academic demands cannot be met. Word recognition in reading, phonic sequences needed for spelling, the motor control and praxis needed for writing may be lacking. Academic failure is the consequence, and frustration once again surrounds the child. He now is convinced that he is stupid and cannot learn. Some children blame themselves for the failure, that somehow they are "bad", that they are being punished. Others project the blame to teachers, parents, and peers. The patterns of defense begun in kindergarten are clearly evident; submission, somatization, depression, regression, negativism, clowning, and aggression are seen. Some children try very hard to conform, developing ritualistic behavior. In all, however, the normal progression of psychological maturation is interrupted, the anxiety engendered is not adequately managed, and neurotic type symptoms may emerge in fears, obsessions and compulsions, nightmares, eating and toileting problems.

Adolescent problems • By early adolescence, if the disability is not recognized, the child is now physically more capable of acting out his emotions

in truancy and in sexual and aggressive behavior. This pattern is more readily seen in children who come from homes where aggression, anti-social behavior, and drugs are the social milieu. The pattern for delinquency emerges in these children: early school failure, frustration, acting out, truancy, apprehension, more frustration, development of poor self-image, alienation, and finally being pushed out of school or dropping out as a response to an overwhelming sense of defeat.[8] The high prevalence of learning disability in adolescents in juvenile detention centers has repeatedly been documented. Compton[9], for example, studied adolescents committed to the Colorado Department of Institutions between 1972-73 and found 90.4% to have clinically diagnosed learning disability. In New York City, Juvenile Court[10] found 84% of the children referred were two or more years retarded in reading. There are of course other variables, such as socio-economic ones, related to delinquency. In a major study, however, Elliot and Voss[11] found school failure in the early grades to be the single most statistically significant variable predicting later delinquency.

It seems apparent that all children who have repeated unexplained absences from school and those who are truant deserve a comprehensive study to understand the reasons behind their school absence. All studies suggest that a majority of these children are suffering from severe learning problems. Not all of these will be in the specific learning disability category; many will be found to have borderline intelligence. But even in these children with low intelligence, an unrecognized learning disability may contribute to their low I.Q.. An article in the *Tampa Tribune* for Sunday, December 5, 1982, while bemoaning the fact that truants are placed in detention centers and while indicating that more counselors for these children are needed, made no mention of the need for comprehensive evaluation for these children and for remedial measures appropriate to those findings. Also glaringly absent was mention of earlier recognition and treatment of these children, perhaps as early as in kindergarten.

Truancy, school drop out, drugs, and delinquency, significant as they are, are but one end stage in the natural history of learning disability and its emotional consequences. Learning disability is the most frequent finding in classes of severely emotionally handicapped children.[12] In a recent survey of 60 children ages 6-12, comprising the entire population of six self-contained classes for severely emotionally handicapped children in two schools in Hillsborough County, 70% had learning disabilities. The cause of these disabilities, however, varied. One third of all the children were suffering from specific learning disabilities, that is, they were children with average intelligence and with adequate educational exposure but who had some problem in spatial orientation and temporal organization as described above. An additional one third also had a learning disability, but these children had, in addition to spatial and temporal perceptual deficits, neurological signs suggestive of structural defect of the central nervous system. An additional 10% had learning disability with attentional defect disorder. Most of these children had already internalized intrapsychic problems, were severely anxious with low self-esteem, depressed, obsessive-compulsive, phobic; many with conduct or behavioral problems, running away from school, oppositional and aggressive. What emerges from this study is: (1) the need for comprehensive evaluation so that each child may be understood, his learning disability evaluated in relation to all other aspects of his function, and comprehensive treatment offered and (2) the need for early detection and intervention of the learning disability to interrupt the pattern of frustration and failure and the accompanying dysfunctional reaction.

Psychiatric implications for parents • We have so far been concerned with the direct effect of learning disability on the child; equally important are the psychiatric implications of learning disability upon his parents. With the identification of learning disability as a biological dysfunction in the child rather than as the result of an inadequate educational system, there is frequently, in parents, an immediate reaction of denial. This is true of families at all levels of the socio-economic scale. Those with high intellectual function, with their tendency to project their own needs into the child, have great difficulty in accepting the child's deficits. Those in the lower socio-economic scale proclaim how well they have done without education. In both groups a common reaction is "He will grow out of it".

As problems continue, denial, suppression, or non-acceptance of the child's difficulty are replaced by depression and guilt in the parents; depression that the child is impaired, that the future is uncertain, that the child cannot fulfill their wishes for him; guilt to find at least one indiscretion in themselves to account for their LD child. Inevitably in their search for the cause of the learning disability and perhaps as a way of relieving their own guilt, parents will project the blame to anyone other than themselves: the obstetrician who delivered the child, the pediatrician who cares for him, the schools which have failed him, the psychologist who tested him, and finally the psychiatrist or neurologist who examined him. Anger is projected to all who are involved with the child, to the spouse, and to the child himself. With some parents, the

resentment is focused in complaints of the money spent for remedial help, special schools, and special tutoring. At times, the anger is suppressed, and with a mechanism of reaction formation, the child may be overprotected and infantilized. Such overprotectiveness may not only inhibit the child's independent function but also disrupt the balance of authority in the household so that the spouse and siblings are relegated to subsystems, which in turn generates resentment usually directed against the LD child whose overprotection labels him as the "sick" one. He then becomes the scapegoat,responsible not only for the reality problems of his disability but for all other problems within the family: the father's job, the daughter's boyfriend, the mother's isolation. As a result of not accepting the child as he is, parents do not give the child the support he needs, adding to the child's feeling of worthlessness and guilt that he cannot seem to please even his parents.

Further, the patterns of behavior the child develops at home are carried with him wherever he goes; the helplessness or the aggressive anger, the control over the household, is reflected in an attempt to control the school, demanding his teacher's attention, or finding excuses for his behavior, projecting blame to the teachers. All of these behaviors are disruptive to controlled school activity, and only serve to feed back increasing frustrations, failure, and resentments.

Psychiatric implications for the school • Psychiatric implications of learning disability, however, are not restricted to the child and his parents—the school too is involved, his teachers and the administration. There is still a tendency to think of a child who does not learn as stupid or lazy or negativistic, the child with a behavior problem as "bad". True, there are stupid, lazy, negativistic, and rebellious children, but it is the wise teacher who is not threatened by her lack of success with this particular child and who asks what the cause of such behavior or poor learning may be. In many cases, a specific learning disability or one complicated with hyperkinesis, or attentional deficit, or poor motor coordination, or even more specific signs of organic insults to the central nervous system is the answer. For each of these, specific treatment modalities are available.

While it is imperative to recognize the learning disability in the child with emotional and/or behavioral problems, it is important to prevent these problems from ever developing. This can be done by recognizing the potential learning disability before the child has failed, by finding in kindergarten—at the latest—those children who are immature in their ability to orient figures and themselves in space and sounds in time. These children may be detected by relatively simple and inexpensive scanning tests, the children vulnerable to failure identified, and specific intervention based upon the pattern of their neuropsychological deficits introduced at the kindergarten or first grade level. Results of such a program have documented its effectiveness in preventing the emotional and behavioral consequences of learning disability.[13]

References

1. Benton, A.: Some conclusions about dyslexia. In: Dyslexia: An Appraisal of Current Knowledge. Edited by Benton, A. and Pearl, D. New York: Oxford, 1978, pp 453-476.
2. Silver, A. and Hagin, R.: A unifying concept for the neuropsychological organization of children with reading disability. Dev Behav Pediatr 3:127-132, 1982.
3. Pearson, G.H.: Emotional Disorders of Children. New York: Norton, 1949.
4. Silver, L.: Children with perceptual and other learning problems. In: Basic Handbook of Child Psychiatry, Vol. III. Edited by Nospitch, J. New York: Basic Books, 1979.
5. Seligman, M. and Meier, S.: Failure to escape traumatic shock. J Exp Psychol 74:1-9, 1967.
6. Seligman, M.; Meier, S. and Geer, J.: Alleviation of learned helplessness in the dog. J Abnorm Psychol 73:256-262, 1968.
7. Seligman, M. and Groves, D.: Nontransient learned helplessness. Psychonomic Sci 19(3):191-192, 1970.
8. Poremba, C.D.: Learning disabilities, youth and delinquency: Programs for intervention. In: Progress in Learning Disabilities, Vol. III. Edited by Myklebust, H.R. New York: Grune & Stratton, 1975, pp 123-150.
9. Compton, R.: Diagnostic evaluation of committed delinquents. In: Youth in Trouble: The Learning Disabled Adolescent. Edited by Kartoville, B. San Rafael, Calif.: Academic Therapy Publications, 1974.
10. Peck, H.B.; Harrower, M. and Beck, M.B.: A New Pattern for Mental Health Services in a Children's Court. Springfield, Illinois: Charles C. Thomas, 1958.
11. Elliott, D. and Voss, H.: Delinquency and Dropout. Lexington, Maine: Heath & Co., 1974.
12. Silver, A.A.: Children in classes for emotionally handicapped. Am J Psychiatry, (in press).
13. Silver, A.A.; Hagin, R. and Beecher, R.: A program for secondary prevention of learning disabilities: Results in academic achievement and in emotional adjustment. J Prev Psychiatry 1:77-87, 1981.

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Language disorders: of primary concern in learning disabilities

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ABSTRACT: Language disorders are frequently associated with learning disabilities and reflect a basic underlying linguistic deficit. Research indicates that language disorders in the preschool years tend to resurface during the school years as learning difficulties, which may well continue through to adulthood. Follow-up studies have reported that such children have the greatest overall problem in the use of language as an academic and social tool. Tests of language competence require the rapid recognition and processing of information. The processing of spoken and written language requires cognitive skills which may be temporally delayed among the learning disabled. Attentional and memory deficits are also noted among the language learning disabled, and require evaluation and intervention. Controversy surrounds the area of learning disabilities since the term has been applied to a widely diverse and heterogeneous group of individuals. As homogeneous subgroups are identified, it is possible that more appropriate diagnosis and remediation will take place.

Mend your speech a little,
Lest you mar your fortunes.
William Shakespeare, 1564-1616
King Lear, Sc. 1, Act 1, Ln. 96

The above citation makes it clear that for centuries we have recognized that adequate speech and language are closely related to one's economic and psychological health. Over the past two decades, we have come to identify a condition of such importance to education and medicine that the entire issue of this journal is devoted to it. "Specific learning disabilities" (SLD) is currently viewed as a handicapping condition that refers to a heterogeneous group of disorders which are presumed to be due to central nervous system dysfunction[1]. Professionals from a wide array of disciplines are frequently called upon to identify, assess and recommend intervention for children and adults who have difficulty in learning. Depending upon the professional's background and training, such an assessment may include a number of different procedures; typically, the measurement of language skills is central to the task.

Why language? • While there is less then consensus on the etiology, diagnosis and treatment of SLD, all would agree that disorders of spoken or written language play a significant role. The current federal definition, to be found in Public Law 94.142, notes that those with SLD exhibit a disorder in understanding or in using the spoken or written word. Other definitions also include a recognition of the importance of oral and written language[2,3] in such educational pursuits as reading, writing and spelling.

As Richardson[4] notes, the DSM III refers not only to delayed language acquisition as one of several diagnostic options among developmental disorders in

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children, but to attention deficit disorders, developmental reading disorders, and developmental language disorders of the expressive or receptive type, as well. As she reports, such conditions are frequently referred to as developmental dysphasia, dyslexia, dysgraphia and/or disorders of verbal and written language, and may not be mutually exclusive. She traces the evidence from the clinical histories of dyslexic (developmental reading disordered) children which reveal that the majority were delayed in the acquisition and use of spoken language. While reviewing some of the new advances in neuroanatomical, neurochemical and electroencephalographic techniques, she points out that "at this time, the only absolute measures of dysphasia, dyslexia and other language disorders in children are still direct tests of verbal and written language.[4]

Language: in the air and on paper • Language is first learned in its spoken form, and only later must we translate symbols on a page. Thus, we have come to recognize that children who evidence early difficulty in the acquisition of language are at the highest risk for future educational failure, exhibiting difficulty in reading and written language[5]. Strominger and Bashir report in a nine year follow-up of language delayed children that while early oral language problems may not cause reading and writing problems, they serve as evidence of an underlying problem that continues to exist, showing itself differently as such children move into and through the educational system. This is not to say that all children displaying speech and language problems in the preschool years will evidence academic difficulties. However, a 15 year follow-up study[6] supports the notion that residual communication problems may be found among adolescents and adults who were earlier diagnosed as being speech and language disordered. The subjects in this study were 50 communicatively impaired pre-schoolers (aged 3:0 to 5:11 at initial diagnosis). Now the 36 males and 14 females are 13:10 to 20:5 years of age, and the follow-up interviews indicated that the language disordered subjects among that group found the greatest overall problem to be that of using language as a tool in academic and social learning. Students must be able to use language in its auditory form (speech), to master its printed form (reading), to use in its expressive form (writing), and in its abstract form (logic and reasoning).[7]

In summary, disorders of language comprise the majority of learning disabilities.[8-12]

Learning how to learn: the LD child as a novice learner • As we have seen, learning is primarily acquired through language, yet the language/learning disordered child has difficulty acquiring information through auditory and/or visual means. The SLD child frequently resembles his younger peers who have yet to develop rapid information-processing skills. He is a novice in an academic world of experts.

Recent research in cognitive psychology has focused upon how learning and experience result in knowledge, and how that knowledge is organized. How is it that we become "skilled performers", using language to organize and process information? As Glaser[13] reports, "emphasis is now being placed on understanding the cognitive structures of the skilled performers and analyzing the processes involved in the transformation of a novice into an expert." For example, he notes that the chess expert displays rapid recognition processes that access previously acquired knowledge, and that it is this fast-access pattern recognition (or encoding) which reduces the mental processing load and permits the individual to perform at a high level of competence. It is not that the chess master is a deeper thinker, Glaser maintains, it is that he is a superior recognizer. Carroll[14] is in agreement, reporting that tests of language competence and those which tap the ability to manipulate abstract concepts, to apply knowledge to problem-solving, and to make simple and rapid comparisons to stimuli are the most likely to measure skills which are required in school learning. The SLD child is seen as lacking (or at least, remaining in a novice status) such rapid recognition processes.

Farnham-Diggory[15] emphasizes that many reading tasks require rapid registration and processing of stimuli, and characterizes learning disability as "now you see it, now you don't disorder" which surfaces only under certain task demands. She maintains that it is not possible to analyze the language processing characteristics of learning disabled children, since traditional tests are not sufficiently pure measures of basic cognitive processes. Others might disagree. Certainly there is a growing body of knowledge which provides some hope that we will be able more completely to understand the psychological processes which contribute to poor school performance. According to Torgesen and Dice[16], who completed a review of all articles on learning disabilities published in eight major journals during the 1977-1980 period, a strong data base and true experimental designs are refining relatively homogeneous subgroups of learning disabled children. Once the subgroups of SLD children are identified, the learning styles and language processing characteristics may be clarified.

Language comprehension: speed is the name of the game • Swanson[17] reports that information processing difficulties clearly differentiate LD students from their normal peers. While they may demonstrate average intellectual performance, they exhibit difficulties in diverse informational processing tasks, including reading comprehension, memory, problem solving and selective attention. Perfetti[18] supports this statement, noting that language comprehension is important to reading and that speeded decoding is intimately tied to skilled comprehension.

Not only must the child learn a system of rules and strategies for extracting information from a written text, he/she must utilize that system under conditions which require rapid processing. Word-decoding and sentence comprehension must be fast enough to permit both word recognition and higher level cognitive functioning. It is not enough to recognize a word; that word must be placed within the larger context of the meaning of a sentence or group of sentences. Processing of such information takes time, and low levels of reading performance frequently result from slow, inefficient word decoding which interferes with the required rapid accessing of knowledge stored in short and long term memory.

Indeed, tests of rapid naming ability are able — to some extent — to differentiate children with diagnosed language and learning disabilities from normally achieving peers. It has been reported that language learning disabled children reveal a significant time delay as well as dysnomia (word finding difficulties) when confronted with the task of naming pictured objects rapidly. Wigg, Semel and Nyustrom[19] recommend the "Naming Pictured Objects" test as an easily administered, two minute task which may serve to identify children with language learning disabilities.

In conclusion, the understanding (comprehension) of language requires rapid processing of incoming information. Under controlled experimental conditions, it has been found that good readers can register letters and the locations of those letters in 35-150 milliseconds. Children with reading problems apparently need more time to pick up such information and store it in memory[15]. In addition, reading comprehension requires the high speed serial coordination of the alphabetic/sound system; the written/spoken semantic (word) system; and the inferences which must be made when text is printed, rather than the inferences which can be made when a speaker provides nonverbal and gestural cues in addition to the spoken words themselves.

Word knowledge and world knowledge • To understand the world around us, it is necessary to understand a good deal more than single words. Language tests which focus upon having the child identify the meaning of single words do not fulfill the function of analyzing the semantic component of language. Indeed, learning disabled children are found to have less proficient conversational strategies than their normally speaking peers[20]. Thus, in the comprehension *and* expression of language, the learning disabled child is found to be not only inefficient, but to experience significant difficulties.

Attention and language • Many LD children are reported to have difficulty in focusing attention on various educational tasks. Teachers frequently speak about short attention spans or difficulties in following directions; such global statements require careful analysis. A number of researchers have noted that attention, defined as a mental activity or capacity, is not independent of specific tasks or settings. Watching a "hyperactive" child sit entranced for hours with a Pac-Man software program, but ignoring his teacher's instructions to turn to a specific page in an arithmetic text and complete five problems should convince us otherwise. In fact, it is now felt that attention is dependent on the internal and external factors which exist at the time of learning new information or processing old, well-known information[21]. Torgeson[22] reports that attentional deficits in language learning disordered children may more accurately reflect deficient information-processing behaviors, a failure to apply appropriate memory strategies, or a lack of organized attempts to direct information-processing skills to specific tasks.

Language disorders among adult LD populations • What happens to the language learning disordered child as he/she matures and moves through — and out of — the educational system? Research has only recently addressed this topic. Two studies, one by Blalock[23] and another by Johnson[24], indicate that language disorders persist into adulthood. Blalock reports on 80 young adults who had been diagnosed as LD earlier in life; who continue to exhibit problems in oral language, reading, written language and thinking. Learning new vocabulary was difficult for them, as was fully understanding directions and rapidly spoken verbal language. Johnson studied young dyslexic adults and noted that they also reveal continuing and persistent auditory language disorders which affect reading and writing. A third study[25] which did not concentrate on the language aspects of learning disabilities was conducted with 160 LD and non-LD young adults. This study reported LD young adults as comparable to non-LD persons in a number of important areas, but not in all. When medical status was reviewed, it was found that 24% of the LD sample were currently using medicine prescribed by a doctor and 9% of the non-LD were using prescription medicine.

Assessment and intervention in language • It has been suggested that the measure of language is a complex task requiring both standardized testing and informal observation. Indeed, if one is to analyze the intersecting variables of reading, writing and speaking, and measuring comprehension, expression, attention, information processing and memory strategies, it is not only complex but extraordinarily time consuming. (We have not attempted to address the more technical aspects of evaluating the acquisition of phonology, syntax, semantics, pragmatics, among many more or less discretely measurable skills.) Speech-language pathologists, audiologists, special educators, including learning disability specialists, psychologists

and reading specialists are among professionals who assess and remediate children and adults with language learning disabilities in terms of the academic impact of such a disorder. Physicians not only provide the medical diagnosis, as appropriate, but above and beyond that, are crucial to the transdisciplinary activities of professional service to children and their parents. As we have observed, children at risk for learning disabilities may be identified in the preschool years, and the physician is most likely to be the professional who is first aware of the child's language problems, be they severe or subtle. Research has indicated that disorders of language in the early years of life surface later as learning difficulties, and these difficulties are thought to continue, particularly if untreated, into adulthood.

We have yet to develop more adequate instruments for assessment of language processing and for determining the existence of homogeneous subgroups of individuals with learning disorders. Nor do we as yet have unfailing intervention approaches to meet their needs. As usual, we have the cart of remediation before the horse of theory. This should surprise no one, since the presence of human need has frequently surpassed the knowledge base required for effective treatment[26].

References

1. Learning disabilities: Issues on definition. ASHA 1982; 24:945.
2. Lay description of specific learning disabilities. Unpublished report. Assoc. for Child. and Adults with Learn. Disabilities. 1982.
3. Language learning disorders position statement. ASHA 1982; 24:937.
4. Richardson, S.: Differential diagnosis in delayed speech and language development. Folia Phoniatr 1983 (in press).
5. Strominger, A.Z. and Bashir, A.S.: A nine-year follow-up of language-delayed children. Unpublished paper presented at ASHA, Chicago, Ill., 1977.
6. King, R.R.; Jones, C. and Lasky, E.: In retrospect: a fifteen-year follow-up report of speech-language-disordered children. LSHSS 1982; 13:24-33.
7. Weller, C.: Language relationships to the handicapping conditions. The Sp. Educator, 1982; 3:1.
8. Aram, D.M. and Nation, J.E.: Preschool language disorders and subsequent language and academic difficulties. J. of Comm. Dis. 1980. 13:159-170.
9. Wiig, E. and Semel, E.: Language disabilities in children and adolescents. Columbus, Ohio: Merrill, 1980.
10. Wallace, G.P. and Liegergott, J.W.: Who shall be called "Learning disabled": Some new directions. Wallace, G.P. and Butler, K.G. (eds): Baltimore, Maryland: Williams and Wilkins, in press.
11. Butler, K.G.: Language processing disorders: Factors in diagnosis and remediation. Central auditory and language disorders in children, Keith, R. (ed.) Houston: College Hill Press, 1981, pp. 160-174.
12. Butler, K.G.: Language disorders: Assessment of certain comprehension factors. Unpublished paper presented to the Sixth World Congress of the Int. Assoc. for Appl. Linguistics, August 1981. University of Lund, Sweden.
13. Glaser, R.: The future of testing: A research agenda for cognitive psychology and psychometrics. Am. Psych. 1981. 36:923-936.
14. Carroll, J.B.: On the theory-practice intervace in the measurement of intellectual abilities. In: Suppes. P. (ed.) Impact of research on Education: Some case studies. Washington, D.C.: National Academy of Education, 1978.
15. Farnham-Diggory, S.: Learning disabilities: a view from cognitive science, J. of Am. Ac. of Ch. Psychiatry, 1980. 19:570-578.
16. Torgesen, J.K. and Dice, C.: Characteristics of research on learning disabilities, JLD 1980. 13:531-535.
17. Swanson, H.L.: A multidirectional model for assessing learning disabled students' intelligence: an information-processing framework. LDQ 1982. 5:312-326.
18. Perfetti, C.A.: Language comprehension and fast decoding: some psycholinguistic prerequisites for skilled reading comprehension. In: Guthrie, J. (ed.) Cognition, Curriculum and Comprehension. Newark, Del.: International Reading Assoc. 1977. pp. 20-41.
19. Wiig, E.H.; Semel, E.M. and Nystrom, L.A.: Comparison of rapid naming abilities in language learning disabled and academically achieving eight-year olds, LSHSS 1982. 13:11-23.
20. Bryan, T.; Donahue, M. and Pearl, R.: Learning disabled children's communicative competence and social relationships. Paper presented at the Symp. on Language, Learning and Reading Disabilities: A New Decade. The Graduate School and Univ. Center of CUNY, May 1980.
21. Gibson, E. and Rader, N.: Attention: the perceiver as performer. Hale, A. and Lewis, M. (eds) Attention and Cognitive Development, NY: Plenum Press, 1979.
22. Torgeson, J.K.: The relationship between memory and attention in learning disabilities, EEQ 1981. 3:51-59.
23. Blalock, J.: Residual learning disabilities in young adults: Implications for rehabilitation, JARC 1982. 13:9-13.
24. Johnson, D.: Persistent auditory disorders in young dyslexic adults, Bulletin of the Orton Society 1980. 30:268-276.
25. White, W.J.; Alley, G.R.; Deshler, D.D.; Schumaker, J.B.; Warner, M.M. and Clark, F.L.: Are there learning disabilities after high school? Exc. Child. 1982. 49:273-274.
26. Butler, K.: Language processing: Half-way up the down staircase. In: Wallach, G.P. and Butler, K.G. (eds) Language learning disabilities in school age children: Baltimore, Williams and Wilkins, in press.

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Learning disabilities and language disorders: Florida schools report

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ABSTRACT: Children with learning disabilities and language disorders constitute the largest group of exceptional students in Florida's public schools. These disorders affect academic progress, social and emotional growth, and ability to cope with the environment. School districts have developed programs for these students based on State Board of Education Rules and local school board policy. Procedures and criteria are required for diagnosis, evaluation and assignment to special programs. The role of the physician in early identification and diagnosis of problems has become increasingly more important. As a member of, or resource to, the multidisciplinary team, the physician can offer vital information leading to appropriate intervention and remediation.

Many students have learning disabilities and/or communication disorders in language and speech. These groups constitute the largest population of school age children with handicapping conditions. Most recent data, the December 1981 membership survey of Florida's school districts, indicate that 58,582 students were enrolled in special programs for specific learning disabilities and 63,812 in programs for the speech and language impaired. This represents approximately 8% of the total kindergarten through 12th grade school population.

This article addresses the current state of the art in learning disabilities and language disorders programs in Florida. In order to establish understanding between the medical and educational communities, the following terms, derived from several Department of Education documents, will be used:

Specific Learning Disabilities (SLD): A learning disabled student is one who exhibits a disorder in one or more of the basic psychological processes involved in the understanding or use of spoken or written language. The student may manifest disorders in listening, thinking, reading, talking, writing, spelling or arithmetic. These disorders do not include learning problems which are due primarily to visual, hearing or motor handicaps, mental retardation, emotional disturbance, or environmental deprivation.

Severely Language Impaired (SLI): A severely language impaired student's primary presenting problem is an interpersonal communication deficit in the native language. The disorder is manifested in language processing and productive problems which are inconsistent with the student's other developmental or cognitive abilities and which interfere with academic, social or emotional progress.

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Exceptional Student: An exceptional student is any child or youth enrolled in or eligible for enrolment in the public schools who requires special instruction or special education services to take full advantage of or respond to educational programs and opportunities because of a physical, mental, emotional, social or learning exceptionality.

Student Evaluation: Evaluation is the determination of a student's physical, mental, emotional, social, communicative, or learning abilities and utilizes professional assessment, appraisal or diagnosis.

Criteria for Eligibility: Criteria are a set of operational definitions establishing the parameters of a handicapping condition and are employed in the determination of a student's eligibility for a special program.

Determining Eligibility and Placement: Determining eligibility is the professional activity of reviewing evaluation information and matching it to criteria. Placement is the professional determination of educational assignments based upon assessed needs and consideration of program alternatives.

Who are the specific learning disabled? • The learning disabled population is a heterogeneous group whose learning problems do not fit neatly into the traditional categories of the handicapped.[1] Children who are learning disabled have average, near average or above average intellectual ability. Their academic performance is characterized by a significant discrepancy between achievement and ability. Learning disabled students have sensory integrity but lack ability to receive, organize, share or remember stimuli efficiently. They are not physically handicapped but may be awkward, poorly coordinated, or inefficient in the use of hands and fingers.

Learning disabilities may exist in isolation or in combination with other handicapping conditions. Frequently the latter exists, resulting in a pervasive discrepancy between ability and achievement in reading, spelling and mathematics at the preacademic or academic level. For the purpose of discussion, we will briefly describe the following types of learning disabilities and related problems: (1) disorders of spoken language, (2) disorders of written language, (3) disorders of arithmetic, (4) disorders of reasoning, and (5) correlates of learning disabilities.[2]

1. *Disorders of Spoken Language (Listening and Speaking)* — No attempt will be made at developing a taxonomy of oral language disorders as this appears in the sections devoted to discussion of SLI. Students may be identified as SLD due to a variety of language delays, disorders or mild deviations. They may have difficulty in formulating their own language and/or understanding that of others. Students exhibiting disorders of spoken language may be diagnosed as learning disabled when the disorder affects academic progress, therefore, learning problems are most often seen after the student reaches the age of seven or eight.

2. *Disorders of Written Language (Reading and Writing)* — Youngsters with learning disabilities involving written language are without a doubt the largest group in the SLD population.[2] A discussion of written language must include the areas of reading, writing and spelling.

In order to distinguish the learning disabled reader from other cases of nonreading, the following student characteristics should be considered:

General reading ability, i.e. word recognition and reading comprehension, is significantly lower than grade placement and intellectual ability.

Listening comprehension is superior to reading comprehension.

Oral reading is characterized by an inordinate number of letter and word reversals, an inability to make sound-letter associations easily, faulty letter blending, poor discrimination of letter sounds, inadequent short-term recall for sequences of letters and words, and confusion among letters and words.

Johnson and Myklebust[3] describe three main types of disorders of writing: dysgraphia, recall deficits, and formulative/syntax deficits. Dysgraphia is a disturbance in the ability to learn the appropriate motor patterns for the act of writing. Clear-cut cases of dysgraphia are uncommon; more frequently they are found in combination with other types of learning disabilities. The best indicator of dysgraphia is the inability of the child to copy what he or she sees.

Johnson and Myklebust[3] attribute recall deficit writing disorders to deficits in visual memory. Students with recall deficits are not dysgraphic because they are able to copy symbols presented visually. However, if the same model is presented orally, the student may be unable to write even a single letter correctly.

The third type of writing disorder discussed by Johnson and Myklebust is a formulative/syntax deficit. This deficit has two components: formulation and production of written material and the use of proper grammar in writing. The two components are usually affected simultaneously. The student exhibiting this deficit could do well in school until required to write essays, book reports, themes, etc. School age children often display such a written language deficit in combination with deficits in oral language.

3. *Disorders of Arithmetic* — If we regard mathematics as a symbolic language, mathematical ability becomes a vital component of a student's general communication capacity. A list of behaviors which are indicative of an arithmetic disability should assist in the appropriate identification of students. They will demonstrate an inability to:

Establish one-to-one correspondence;
Count meaningfully;
Associate auditory and visual numerical symbols;
Learn cardinal and ordinal counting systems;
Understand the principle of conservation of quantity;

Perform arithmetic operations;
Understand the meaning of process signs;
Understand arrangement of numbers on the page;
Remember the sequence of steps to be used in mathematical operations.
Choose the principles for solving problems in arithmetic reasoning.

4. *Disorders of Reasoning* (Thinking and Conceptualization) — There appear to be two key concepts that affect students' reasoning abilities: organization and adaptation. At the earliest stages of development, children must organize sensory experiences and determine some level of meaningfulness. At the same time, children are expected to integrate parts into a familiar whole. The following list provides partial information about cognitive disorders:[4,6]

Concrete behavior characterized by a dependence upon immediate experience as opposed to abstract behavior that transcends any given immediate experience and results in the formation of conceptual categories;

Poorly differentiated, unstable, and inconsistent generalizations;

Little differentiation of part-whole relationships;

Poor short-term or long-term retention;

Either a marked lack in persistence or compulsive perseverance;

Field dependence as opposed to field independence;

Internally controlled versus externally controlled behavior;

Rigidity, resistance to change.

5. *Correlates of Learning Disabilities* — The correlates of learning disabilities are defined as those types of impaired perceptual and motor functions that are often seen in learning disabled children and that are classified as learning disabilities by some authors.[2] Learning disabled children may demonstrate such correlative disorders as auditory or visual perceptual problems, perceptual-motor disorders, or hyperactivity. Some of these difficulties can be successfully treated but this will not alleviate an academic problem, such as a reading disability. For example, if poor performance in reading is alleviated solely through successful treatment of hyperactivity, it is doubtful that the student ever had a specific reading disability.

The physician may use the following list to catalog perceptual disorders:

Impairment of discrimination in which the child may be unable to distinguish between two different auditory, visual, or tactile stimuli;

Impaired recognition of common visual, auditory, or tactile stimuli;

Poor time, space, or distance orientation;

Poor body image;

Poor discrimination of figure-ground or part-whole relations;

Poor left-right orientation;

Poor eye-hand coordination.

The following motor disorders are exclusive of those disabilities which would automatically lead to a diagnosis of a neuromuscular condition. Some that might occur in a child with SLD are hyperactivity, hypoactivity, poor fine or gross motor coordination, general clumsiness or awkwardness, and frequent delayed motor milestones.

Who are the severely language impaired? • Language, speech and hearing abilities are fundamental processes in learning and in communication. Because impairment of these communicative processes interferes with learning, the development of communicative competence in children is essential. The language impaired child who demonstrates problems in language knowledge and use may also demonstrate academic, social and emotional problems. This same individual may demonstrate difficulties in higher-order thinking, in learning the curriculum and in managing the language of instruction.

The role of language in social-emotional behavior, academic success, and cognitive development is the concern of many disciplines. Richardson,[7] among others, has stated that until the child achieves spoken language facility, academic learning will be seriously impeded. Recent studies also challenge the idea that the language impaired child will succeed in spite of his/her earlier problems with the acquisition and development of oral systems.[8,10] The common finding is that the language impaired preschool child will, in a large majority of instances, evidence failure in reading or writing. It is crucial, therefore, that the language deficits of the child be identified and addressed as early as possible, and be remediated to the greatest extent possible..

Language disorders are defined in terms of difficulties in either processing or production. Language processing involves perceiving, discriminating, assigning significance to and interpreting spoken words, phrases, clauses, sentences and discourse. Language production involves forming ideas or thoughts, finding words to express them, formulating sentences to structure the words, and producing the combined product in a spoken language form.[11] Within this text, we will describe the following components of language disorders: (1) disorders of content, (2) disorders of form, and (3) disorders of use.[12]

1. *Disorders of Content* (Semantics) — Children with language disorders in this area demonstrate difficulties in deriving meaning from language or in using language meaningfully. For example, the student may have problems with certain categories of words, multiple-meaning words, word relationships, figurative language or idea manipulation.

2. *Disorders of Form* — There are three aspects to disorders of form, each representing difficulties in understanding or using the structure of the language code. Disorders of phonology are related to problems with individual units of the sound system or elements of prosody. The student may misperceive or misarticulate phonemes or may be unable to handle the pitch, pause, stress or duration patterns of the code. A second aspect of form is morphology which refers to the smallest unit necessary to establish word meaning. The student may misperceive or misuse noun plurals, verb tenses, prefixes, or comparatives. The third aspect of form is syntax. Disorders of syntax are noted by difficulties in applying grammatical rules for forming phrases, clauses and sentences. The student may misuse word order or may be unable to understand or use various grammatical structures like negatives, questions, infinitives, or conjunctions.

3. *Disorders of Use* — Students who demonstrate disorders of use have difficulty in perceiving or in utilizing language as appropriate to the goals of the speaker and the context of the situation. The student may misinterpret or misuse a message in social interaction (pragmatics) or may be unable to use language for intrapersonal problem solving (mathematics).

For both the SLD and SLI populations, oral language problems may be manifested in poor symbolization, reduced vocabulary, syntactic omissions and deviations and general language delay. Speech behavior may be characterized by malapropisms, inappropriate grammar or vocabulary and inordinately long pauses. The determination of whether a student should be served by the SLD or SLI program, or both, must be made by a multidisciplinary team. The description must be based on all evaluation data.

How are students selected for special programs? • Procedures and criteria for diagnosis, evaluation and assignment of students to special programs are set forth in *State Board of Education Rules* (SBER) and in documents prepared annually by each school district. SBER address general requirements as well as specific requirements for both SLD and SLI. All students referred for consideration of placement in exceptional programs must be evaluated by persons who hold a valid license or certificate to practice a profession in Florida or who hold a valid Florida teaching certificate. Evaluations must provide for the use of valid tests, must be administered in conformance with instructions provided by the producer of the test, and must be in a language or mode of communication commonly used by the child.

A staffing committee composed of a minimum of three professional personnel meet as a team to review diagnostic, evaluation, educational or social data. This committee is responsible for recommending student eligibility for special programs and for recommending the student's educational placement. Usually, this committee in cooperation with the student's parent(s) will also develop the individual educational program (IEP) for the student. The school district administrator for exceptional education (or designee) has the final responsibility for reviewing the staffing committee recommendations and approving student eligibility and placement.

The evaluation procedures for students suspected of having a *specific learning disability* include the collection of data using standardized assessment measures in the areas of intelligence, achievement and psychological processes. In addition, information is sought through parent conferences, classroom observations and educational alternatives designed to alleviate the student's problems prior to any formal evaluation.

Table 1 lists the areas tapped during the evaluation and persons who may be assigned to conduct or compile each portion of the process. With the exception of the intellectual measure, which is assigned to a psychologist, all other portions of the evaluation may be a shared responsibility. Additional information may be obtained through a medical evaluation. Thus the evaluation process is conducted by a multidisciplinary team or group of persons.

Table 1. — SLD Evaluation Process

Data Source	Persons Involved
Conferences	Parents, Teachers, Principal and Counselor
Observations	Teachers, Psychologist and Counselor
Educational Alternatives	Teachers
Intelligence Test	Psychologist
Achievement Test	Psychologist, SLD Teacher and Counselor
Psychological Process Test	Psychologist, SLD Teacher and Counselor

Upon completion of the required evaluation components, the multidisciplinary team determines whether or not the student is SLD. This team is composed of the student's regular teacher or specialist with knowledge in the area of the suspected disability, and a person qualified to conduct diagnostic examinations of children. This team may also function as the staffing committee if one member is a district administrator or designee and can then determine eligibility and placement.

In *speech and language impaired* programs, the speech-language pathologist has major responsibility for evaluating students suspected of having a severe language impairment. Standardized test instruments or published normative data in speech-language pathology are employed in these assessment programs. Medical and psychological examinations are included in the evaluation process and developmental and social histories become part of the data base. The speech-language pathologist must be a member of the staffing committee and must assist in program planning for students determined eligible for language programs.

In general, the following criteria for eligibility in programs for the severely language impaired are being used in Florida:

Evidence of a severe deficit in language as exhibited by performance in processing or production of language in the areas of content, form (phonology, morphology and syntax), and use.

Evidence of average intellectual potential as measured by nonverbal tests as well as individual intelligence tests.

Essentially normal hearing, vision and emotional adjustment or evidence that any deficits in these areas are not prime presenting problems.

Evidence that language impairment is affecting or has the potential to affect academic, social or emotional progress.

Since severity of the language disorder should be considered in light of chronological age, districts are encouraged to use the following severity guidelines:

Preschool (up to five years of age) — 6 to 9 month deficit.

Kindergarten and first grade (up to seven years of age) — 9 to 12 month deficit.

Second through fifth grades (up to eleven years of age) — 12 to 24 month deficit.

Sixth grade through high school — 24 to 36 month deficit.

What are the special programs for SLD and SLI? • The delivery of programs and services to the SLD and SLI populations should be based on a knowledge of the individual's needs, primary disability, available resources, and competencies of professional personnel. A wide range of staffing and placement options are available in Florida's public schools. These include: consultation with regular educators; itinerant instruction; resource rooms; full-time special classes; special day schools; nonpublic schools; contractual agreements; and special services in a hospital, treatment center or home setting.

The majority of SLD students are served on a part-time basis in resource classes. The more severe students are placed in self-contained classes on a full-time basis. The self-contained class is more effective at the elementary level where students receive all academic instruction from the SLD teacher. As the student reaches the secondary level, prevocational, and vocational opportunities may become critical curriculum elements, with the SLD teacher providing instruction on a part-time basis in the basic skills and in school survival skills which assist the student in the regular class.

Program services for the SLI are usually provided in full-time special classrooms or resource rooms. Inclusion in the regular education classroom is based on improvement in language, academic and social skills. Since a severe language impairment interferes with academic achievement, it is necessary to structure remedial programs with maximum teacher-pupil contact. The following represents most models now being used in Florida for providing intensive remediation for severely language impaired students:

Preschool (ages 3-5) — maximum of 6 students with a teacher aide.

Primary (grades K-3) — maximum of 6 to 8 students without a teacher aide; 9 to 12 students with a teacher aide.

Intermediate (grades 4-5/6) — maximum of 8 to 10 students without a teacher aide; 11 to 15 students with a teacher aide.

Middle School (grades 6/7-8/9) — maximum 10 to 14 students without a teacher aide; 15 to 20 students with a teacher aide.

High School (grades 9-12) — students are served from one to four periods a day by one speech-language pathologist; the remaining periods are spent in other classes in the high school selected to meet the needs of the student.

Most school districts assign speech-language pathologists to programs for the SLI. Many districts employ specialists in both specific learning disabilities and speech-language pathology, since they are best trained to meet the needs of the student with a severe language impairment. The speech-language pathologist has the knowledge of normal and deviant language and the learning disabilities teacher has the understanding of the academic curriculum. This team-teaching model with both the SLD teacher and the speech-language pathologist can best meet the academic, social and language needs of the students.

The physician's role • Until the past decade, children's learning was considered to be solely an educational problem, the domain of the school. Recently, however, the physician has appropriately become involved in the learning problems of children.

Training in the knowledge of childhood disease and normal growth and development has been expanded to include training in emotional and mental growth and development. Since the child's developing central nervous system and his reactions to the environment are key factors to task learning, training in these areas has become an increasingly important aspect of the physician's armamentarium.[13] Physicians now have a broader understanding that the ability to learn to speak, read, write, spell and compute depends largely upon an intact nervous system and an enriching environment.

Many physicians are playing a more prominent role in diagnostic evaluation of language and learning disabilities, a role which entails more intensive scrutiny of function and interaction.[14] For example, physicians are utilizing more sophisticated methods for the assessment of underlying neurodevelopmental contributions to a child's school failure. Physicians are also becoming increasingly more sophisticated in the evaluation of family dynamics and the assessment of environmental factors involved in school failure.[15]

The physician who sees preschool children has the first opportunity to evaluate a child's functioning level. He follows the child through early developmental stages and the active preschool years prior to school enrollment. Once the child is in school, the physician continues to evaluate the child's physical growth and development and should include mental, emotional and learning development in his ongoing case management. Much can be learned from observing the child in the waiting room and the office and from questioning the parents or primary care person. Questioning the older child can also reveal interesting information regarding learning problems and attitude. It is important for the physician to listen to the concerns of the parents and the child in addition to gathering case history data and examining the child. Like a jigsaw puzzle, all the pieces must be examined carefully and put together accurately to achieve a complete picture.

An informal checklist of behaviors associated with learning and language problems or development lags can be a most effective tool for the physician. No single behavior would necessarily lead to a diagnosis of specific learning disabilities or language disorder, but a profile with a number of questionable behaviors would indicate a need for further evaluation. At this point, the physician may determine the need to refer the child to other specialists for evaluation. These might include an ophthalmologist, neurologist, learning disability specialist, speech-language pathologist, audiologist, or psychologist.

Tables 2 and 3 may serve as an example of the types of behaviors to observe when assessing the possibility of a language or learning problem.

The most important consideration by the physician or anyone influential in the child's environment is to identity problems as early as possible. As stated by others in this issue, early identification and early intervention may prevent future problems in learning. In fact, recent research has indicated that appropriate early intervention can be successful.[10,16] We can no longer take the "wait and see" or "he'll grow out of it" attitude. By using the sample checklists or ones similar to them, physicians along with other professionals and parents can take the essential first step to helping a child with a learning or language problem. With appropriate diagnosis and intervention, the chances are good that the child will improve and that learning and language will become a positive experience. The physician is an integral member of the network of professional and community resources that offers hope for this child.

References

1. Kirk, S.A. and Gallagher, J.J.: Educating Exceptional Children, 3rd ed., Boston, Houghton Mifflin Company, 1979.
2. Myers, P. and Hammil, D.D.: Learning Disabilities, Austin, Texas: Pro-Ed, 1982.
3. Johnson, D. and Myklebust, H.R.: Learning Disabilities: Educational Principals and Practices, New York, Grune and Stratton, 1967.
4. Fowler, W.: Cognitive Baselines in Early Childhood: Development Learning and Differentiation of Competence Rule Systems. In Cognitive Studies, Vol. 2: Deficits in Cognition, (ed.) Jerome Hellmuth, New York, Bruner/Mazel, 1971.
5. Flavell, J.H. and Wohlwill, J.F.: Formal and Functional Aspects of Cognitive Development. In Studies in Cognitive Development, (eds.), D. Elkind and Flavell, New York, Oxford University Press, 1969.
6. Kagen, J. and Kogen N.: Individual Variation in Cognitive Processes. In Manual of Child Psychology, Vol. 1, 3rd ed., (ed.), P.H. Musson, New York, 1970.
7. Richardson, S.O.: Accountability to Child with Disorder of Communication, Asha 16:3-6, 1974.
8. Strominger, A.Z. and Bashir, A.S.: Nine-Year Follow-up of Language Delayed Children. Paper presented to the Annual Convention of the American Speech-Language-Hearing Association, Chicago, 1977.
9. Hall, P.K. and Tomblin, J.B.: Follow-up Study of Children with Articulation and Language Disorders, Journal of Speech and Hearing Disorders 43:227-241,1978.
10. Aram, D.M. and Nation, J.E.: Preschool Language Disorders and Subsequent Language and Academic Difficulties, Journal of Communication Disorders 13:159-170, 1980.
11. Wiig, E. and Semel, E.: Language Assessment and Intervention for the Learning Disabled, Columbus, Ohio, Merrill, 1980.
12. Bloom, L. and Lahey, M.: Language Development and Language Disorders, New York, John Wiley & Sons, 1978.
13. Guralnick, M.J. and Richardson, H.B. (eds.): Pediatric Education on Needs of Exceptional Children, Baltimore, University Park Press, 1980.
14. Boder, E.: School Failure — Evaluation and Treatment, Pediatrics 58:394-398, 1976.
15. Levine, M.D.: Child with School Problems: Analysis of Physician Participation, Exceptional Children 48:296-304, 1982.
16. DeAjuriaguerra, J.; Jaeggi, A.; Gaignard, F.; Kocher, F.; Maguard, M.; Roth, S., and Schmid, E.: Development and Prognosis of Dysphasia in Children. In Normal and Deficient Child Language, Morehead & Morehead, (eds.), Baltimore, University Park Press, 1976.

● Ms. Work, State Department of Education Bureau of Education for Exceptional Students, Johns Building, Tallahassee 32301.

Table 2.—Language And Speech Development.*

Reported Behavior	Appropriate	Questionable	By Age
1. Cries and babbles	_____	_____	Birth-12 months
Pays attention to family and environmental sounds	_____	_____	
2. Uses first meaningful word	_____	_____	12 months
Understands phrases and simple grammatical patterns	_____	_____	
Enjoys rhymes and simple songs	_____	_____	
3. Recognizes names of familiar objects, persons and pets	_____	_____	12-24 months
Enters naming stage	_____	_____	
Uses jargon and echolalia	_____	_____	
4. Puts two or more words together	_____	_____	2 years
Names simple body parts	_____	_____	
Asks for food, drink, toilet	_____	_____	
Follows two or three directions	_____	_____	
5. Uses simple yes/no questions, negatives, pronouns	_____	_____	2-3 years
Uses sentences of about four words	_____	_____	
Understands color names	_____	_____	
Comprehends time words	_____	_____	
6. Uses simple sentences	_____	_____	3-4 years
Uses sentences of five or more words	_____	_____	
Follows two action directions given together (e.g. "Pick up the ball and give it to me.")	_____	_____	
7. Uses intelligible speech for social purposes, to communicate ideas, to acquire information	_____	_____	4-5 years
Understands simple cause and effect	_____	_____	
8. Learns colors, counting, time and space concepts	_____	_____	5-6 years
Begins to develop a sense of humor	_____	_____	
Advances in categorization and synthesis of precepts	_____	_____	

A language disorder may be indicated if a child
- is reluctant to talk
- is difficult to understand
- is too self-conscious when speaking
- consistently uses incorrect grammar
- becomes defensive, nervous or withdrawn when speaking

(Excerpts from Bangs, 1968)

*Bangs, T.: Language and Learning Disorders of Preacademic Child, New York, Appleton-Century-Crofts, 1968.

Table 3.—Identifying The Young Child With A Learning Disability.*

Reported Behavior	Appropriate	Questionable	Needs Further Investigation	
I. At Home				
Is child subject to				
1. poor sleeping habits?	_____	_____	a. crying at bedtime	_____
			b. restlessness at night	_____
			c. nightmares	_____
2. frequent, unpredictable temper tantrums?	_____	_____		
3. moodiness, irritability?	_____	_____	a. always	_____
			b. after school	_____
			c. weekends	_____

4. stomach aches or headaches, related to school?	_____	_____	
5. dawdling in morning?	_____	_____	a. refuses to dress _____ b. no breakfast _____ c. late for school bus _____
6. complaints about school?	_____	_____	
7. restlessness. Is he "always on the move"?	_____	_____	a. at mealtimes _____ b. trips to supermarket _____ c. visits to friends _____
8. difficulty adjusting to new situations?	_____	_____	
II. At School			
Is the child			
1. enjoying school?	_____	_____	
2. interested in learning activities?	_____	_____	a. rejecting "table" activities _____ b. refuses to "work" at home _____ c. eager, then tunes out _____
3. learning to read?	_____	_____	
4. able to follow directions?	_____	_____	
5. able to concentrate?	_____	_____	
6. relating to peers?	_____	_____	
Teachers' comments			
III. Developmental Irregularities			
Is there evidence of			
1. delayed language or speech problems?	_____	_____	a. articulation _____ b. syntax _____ c. word finding _____
2. poor judgment and lack of common sense?	_____	_____	a. responsible _____ b. accident-prone _____ c. in another world _____
3. impulsitivity?	_____	_____	
4. poor motor coordination?	_____	_____	a. balance, hopping _____ b. skipping _____ c. catching ball _____
5. immature small muscle control?	_____	_____	a. cutting, coloring _____ b. writing _____ c. self-help _____
6. poor memory?	_____	_____	
7. lack of established handedness?	_____	_____	
IV. Family History			
Is there a history of			
1. learning difficulties in immediate or extended family?	_____	_____	
2. "retardation" in family?	_____	_____	
3. problems with siblings?	_____	_____	
4. ongoing problems in family?	_____	_____	
V. Accomplishments			
1. What are the child's interests?	_____	_____	
2. What can he do well?	_____	_____	

(Osman, 1979)

*Osman, B. B.: Learning Disabilities: A Family Affair, New York, Warner Books, 1979.

The University of Florida Multidisciplinary diagnostic and training program

John J. Ross, M.D. and Nilda Candelario, M.D.

ABSTRACT: The University of Florida Multidisciplinary Diagnostic and Training Program provides services for children with complex medical, learning, and/or behavioral disorders. This regional program is described. The medical, educational and psycholinguistic characteristics of 29 children who have participated in the Program's diagnostic classroom are discussed. Multidisciplinary intervention strategies for helping these children and the preliminary results attained with their use are presented.

In Florida during the past eight years enactment of Public Law 94-142 and the Florida Primary Education Program (PREP) have put great strain on the public school system. PL 94-142 (Education for All Handicapped Children Act) has recognized learning disabilities as a designated handicapping limitation; established that multidisciplinary teams should reach a consensus on a child's eligibility for special services through the school system; assured the child of free, appropriate education which meets his/her unique needs; and guaranteed the child the right to due process of law. This federal legislation stresses early identification and intervention of children with learning difficulties and it mandates that they must have available to them an education tailored to meet their needs. The Florida Primary Education Program provides a means within each school district by which kindergarten through third grade underachieving children can be identified and taught but, unfortunately, it does not provide extensive services for the early diagnosis and treatment of children with complex learning, behavioral and/or medical problems such as epilepsy, attention deficit syndrome, cerebral palsy, mental deficiency, hearing and vision impairment, and emotional disturbances. Since it is apparent that multidisciplinary input is needed to ameliorate these kinds of handicapping conditions, the University of Florida Multidisciplinary Diagnostic and Training Program (MDTP) was begun to assist school districts in north central Florida to provide diagnostic and intervention strategies for children with complex learning, behavioral, and medical problems. In short, the University of Florida and the neighboring school districts are complying with the spirit of PL 94-142.

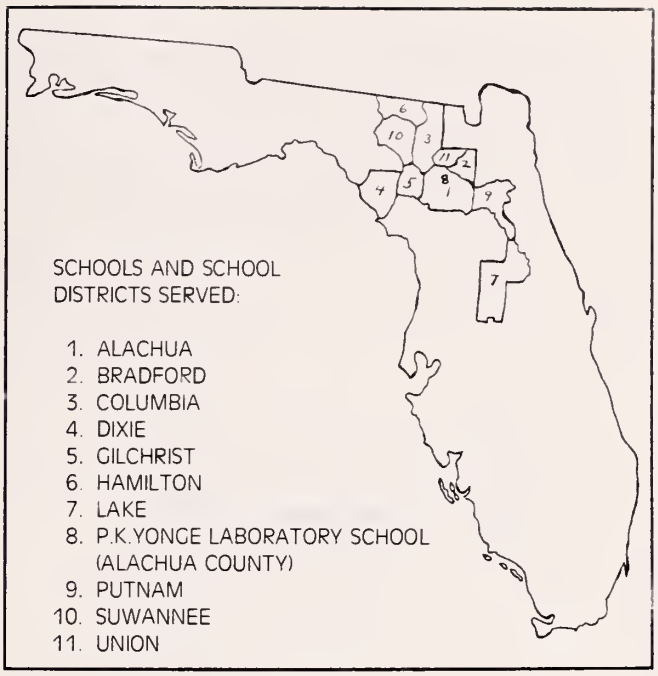
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Program •The Multidisciplinary Diagnostic and Training Program has been established as a joint program between the J. Hillis Miller Health Center and the University of Florida College of Education to provide a model which will develop, implement, and demonstrate a diagnostic and prescriptive approach to assist in evaluation of complex problems, develop individual education plans, help with initial placements, and provide for student reevaluation. By the signing of cooperative agreements between the Department of Pediatrics, College of Education and ten county school boards and one school the MDTP was formed. The participating county school districts are Alachua, Bradford, Columbia, Dixie, Gilchrist, Hamilton, Lake, Putnam, Suwannee, and Union (Fig. 1). Each district has developed a referral structure which enables it to identify and prioritize its most difficult and complex learning problems at the kindergarten to sixth grade levels. The child, accompanied by his parent, is evaluated for two to three days by a diagnostic team consisting of a pediatrician, psychologist, speech pathologist, and special educator. A combined staffing by the multidisciplinary team in conjunction with the school district's coordinator, psychologist, and teacher leads to a joint decision whether the child should return to his original classroom accompanied by a consultant teacher or whether he should go to the diagnostic and training classroom at Norman Hall in the College of Education. Permission from the student's parents and his school is required before he is allowed to attend the diagnostic classroom for one to six weeks with the main idea of discovering exactly how the child learns. Instruction is characterized by techniques of applied behavior analysis and criterion referenced instruction. The advantage of this data-based instruction is that the teacher is able to evaluate the effects of instruction on a child daily and make immediate instructional changes. The teacher who will assume responsibility for teaching the child in his local community visits the diagnostic classroom to observe how the child is handled in this setting. The student is then discharged from the diagnostic and training classroom to return to his local school accompanied by a consulting teacher to help implement the recommended intervention strategies. A parent training program focuses on assisting parents in behavior management and remediation of school problems and is provided both at the diagnostic classroom and in the community.

Materials and methods • This paper presents much of the data collected by the Multidisciplinary Diagnostic and Training Program staff for the 29 children who have attended the MDTP classroom in the last year.

The data include:

A. Medical evaluation
 1. Complete medical and developmental history
 2. General physical examination
 3. Neurological findings
 4. Results of special tests when performed (CT brain scan, electroencephalogram, urine metabolic screening, thyroid studies, etc.)
B. Psychological evaluation
C. Speech, language and hearing evaluation
D. Educational assessment
E. Performance data and academic assessment during and after MDTP experience



The 29 children were referred to the MDTP by the school system because of complex learning, behavioral, and/or medical problems. They met these criteria: (1) Children from grades kindergarten - sixth, and (2) Children whose potential indicate that they may be primarily educated in a regular classroom setting.

Data, interpretation and analysis • A total of 110 children have been evaluated by the MDTP staff from December 1981 until December 1982. Twenty-nine of the children (26.3%) have spent from two to six weeks in the MDTP classroom. For the remainder, specific recommendations and suggestions regarding teaching strategies and behavioral management programs have been relayed to their teachers by one of the consulting educators in the program.

Of the 29 children who have participated in the MDTP classroom, 22 were boys and seven were girls which is similar to the 3-4:1 ratio described in the literature regarding the prevalence of academic problems in boys.

Twenty-six children were from Alachua County, two from Dixie County, and one from Suwannee County. These children were considered by their schools as some of the most difficult-to-teach students.

Table 1. — Age Distribution.

Age	Number of Children
6	7
7	3
8	5
9	3
10	4
11	3
12 or more	4

Table 2. — Disbribution by School Grade Placement

Grade	Number of Children
K	2
1	6
2	7
3	5
4	4
5	3
6	1

Table 3. — Educational Setting.

Placement	Number of Children
Regular Education	18
Specific Learning Disabilities (SLD)	4
Emotionally Handicapped (EH)	3
Emotionally Handicapped/Educable Mentally Retarded (EH/EMR)	2
Regular Education + part time special education	1
Transitional Program	1

They ranged from six to 12 years old (Table 1). Most were first and second graders but they ranged from kindergarten to the sixth grade (Table 2). The majority of children (72%) came from regular education classrooms but 11 were from various special education programs (Table 3). Children with academic difficulties often present behavior problems and motor disabilities as well. The National Institute of Neurologic Diseases has defined the diagnostic category of Minimal Brain Dysfunction as follows: "Children of near-average, average or above-average general intelligence with learning and behavioral disabilities, ranging from mild to severe which are associated with deviations of function of the nervous system. These deviations manifest themselves by various combinations of impairment in perception, conceptualization, language, memory, control of intention, impulse or motor function."[1] Different subclassifications of the Minimal Brain Dysfunction Syndrome have been proposed. One of the best known is the Venn Diagram which depicts the subcategories of Learning Disabilities, Behavioral Problems and Motor Difficulties as interconnecting circles (Fig.2). Swaiman[2] described the seven various combinations of these subcategories as follows:

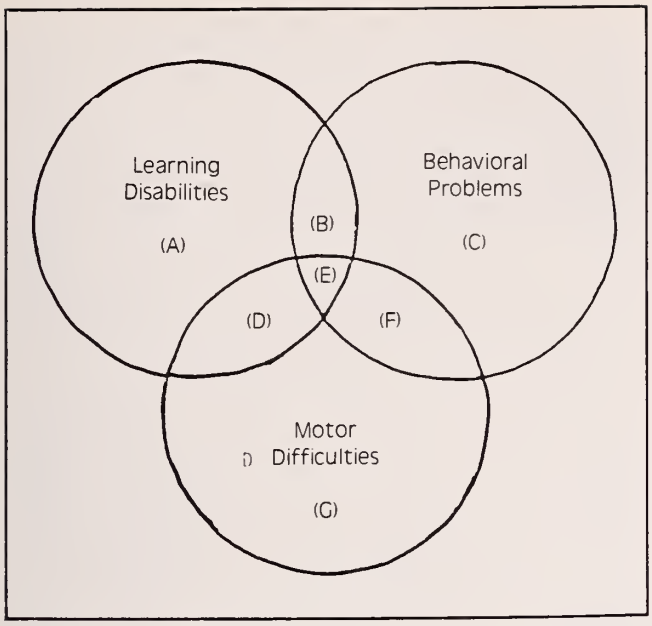
1. Learning disabilities, no motor disabilities, no behavioral difficulties
2. Learning disabilities and behavioral difficulties
3. Behavioral difficulties, no motor disabilities, no learning disabilities
4. Learning disabilities and motor disabilities
5. Learning disabilities, behavioral difficulties and motor disabilities
6. Behavioral difficulties and motor disabilities
7. Motor disabilities

Although the general philosophy of the MDTP is not to make specific diagnoses or "label" the children, we tried to group those problem areas. This was done to assess the specific kind of educational approach that worked for these children.

Five children (all boys and 14% of the total) had only learning disabilities. Twenty-five percent (six boys and one girl) showed a combination of learning and behavioral problems. Two children (a boy and a girl) had behavioral problems that were interfering with their learning but no specific learning disability. Learning disability was associated with motor problems (either gross or fine motor) in five children (two boys and three girls). The complete spectrum of the Minimal Brain Dysfunction Syndrome including learning, behavioral and motor problems was the most frequently encountered combination in 27% of the children (six boys and two girls). Two children (both boys) had only motor problems that interfered with their school performance. None of the children showed the combination of behavioral and motor problems.

It is interesting to note that behavior problems in most of the children seem to be secondary to their academic difficulties. Children who have experienced the frustration of repeated academic failure often develop secondary behavioral problems such as: "acting-out" behavior, attention seeking devices, masked or evident depressions and discipline problems. They often develop a negative attitude toward school, teachers and all academic endeavors. They are often ridiculed by parents and peers and respond with hostility, aggression and defiance.

Frequently observed behaviors in the children referred to our Program included getting out of the seat, talking out loud, interrupting other children and self-stimulatory behaviors.



VENN DIAGRAM
Percentage of MDTP Classroom Children in Each Learning Category

(A) Pure Learning Disabilities—5 children (17%)
(B) Learning Disabilities with Behavioral Problems—7 children (21%)
(C) Pure Behavioral Problems—2 children (6%)
(D) Learning Disabilities with Motor Difficulties—5 children (17%)
(E) Learning Disabilities associated with Motor Difficulties and Behavioral Problems—8 children (24%)
(F) Motor Difficulties with Behavioral Problems—0
(G) Pure Motor Difficulties—2 children (6%)

Figure 2.

By contrast, children with motor disabilities did not show any behavioral problems suggesting, perhaps, a better adaptation to their limitations or more tolerance from adults and peers to these children's poor academic performance.

Children with academic difficulties may have a wide range of intellectual abilities. By definition children with Minimal Brain Dysfunction Syndrome have near-average, average, or above-average general intelligence. Children with mental retardation will exhibit school difficulties, as well as problems with their adaptive behaviors and social skills.

In our group of children, five (17%) had mild mental retardation while 20 (69%) had intellectual quotients in the near-average to superior range (Table 4).

Children who showed difficulty in school often have a history of delay in language skills and language development. The basis for education is the acquisition of information and knowledge through words, both written and spoken. The adequate development of language skills is therefore a prerequisite for proficiency. Language skills include not only the verbal aspects of vocabulary and semantics but also the basic symbols used for communication such as shapes, numbers, and letters. Adequate auditory memory skills and ability to process sequential commands are of particular importance in the learning process.

Only four children in our group (14%) had no problems regarding their language skills. Eleven children (37%) had some degree of language delay, most often consistent with their overall intellectual capacity. In one child a moderate hearing loss was also present (Table 5). Another child had some autistic features and mental retardation. Specific language deficits were common, particularly the processing of critical elements (ability to remember multiple step commands).

Table 4. — Intellectual Function.

Intellectual Quotient	Range	Number of Children
More than 120	Superior	1
111 - 115	High Average	2
90 - 110	Average	10
(a) without verbal/performance discrepancy		6
(b) with verbal/performance discrepancy		4
80 - 89	Dull - Normal	7 *
70 - 79	Borderline	4
55 - 69	Mild Mental Retardation	5

* One of these children had attentional problems and the results of the WISC-R are believed to be a "minimal estimate" of his IQ.

Table 5. — Language Problems.

Deficit		Number of Children
None		4
Language Delay		11
(a) Consistent with overall intellect	6	
(b) Secondary to autism and mental retardation	1	
(c) Associated with hearing loss	1	
(d) Associated with articulation problems	1	
(e) Associated with attentional deficit	1	
(f) Associated with vocabulary and semantics problem	1	
Articulation Problems		3
Specific Language Deficits		11
(a) Processing critical elements	5	
1. with problems for abstract concepts	1	
2. with auditory memory problems	1	
3. with anomia	1	
(b) Auditory memory problems	2	
(c) Oral apraxia	1	
(d) Expressive language deficit with poor grammar and articulation problem	1	
(e) Attentional problem	1	
(f) Sentences and grammatic completion	1	

Table 6. — Educational Assessment.

Academic Performance	Number of Children	Percent
1. Below grade level at least one area	24	82%
2. At grade level	2	6%
(a) motor, behavior problems	1	
(b) language behavior problems	1	
3. Above grade level	3	7%
(a) motor problems	2	
(b) behavior problems	1	

All the children who have participated in the MDTP classroom have been referred because of low academic growth and performance. Twenty-four of them (82%) did indeed have a below-grade level performance in at least one of the educational tests (Key Math Test, Kottmeyer Spelling Test, Woodcock Reading Mastery Test or the Brigance Inventory of Basic Skills). Three children, however, had above-grade level academic performance. Two of these had motor problems interfering with their writing ability and one was a child with behavior problems. Two children had academic skills at grade level (Table 6).

This shows that some children — even when doing poorly in school — are in fact learning more than expected. All efforts must be made by thorough evaluation to identify factors interfering with the academic performance so that they are individually dealt with in the proper educational environment.

Table 7. — Medical History

Problem	Number of Patients		Percent
A. Problems in Pregnancy, Labor and Delivery			
1. None		6	21%
2. Problems in Pregnancy		9	31%
(a) Maternal illness	4		
(b) Bleeding	3		
(c) Weight loss and physical abuse	1		
(d) Polyhydramnios	1		
3. Problems During Labor		9	31%
(a) Premature labor	3		
(b) Post-term labor	2		
(c) Prolonged labor	4		
4. Problems During Delivery		12	41%
(a) Cesarean section	9		
repeat section	2		
cord prolapse	1		
fetal distress	1		
cephalopelvic disproportion	1		
failure to progress	1		
breech presentation	1		
CPD with maternal death	1		
unknown cause	1		
(b) Breech delivery		2	
(c) Forceps delivery		1	
B. Medical Problems in Newborn Period			
1. None		12	40%
2. Jaundice		5	17%
3. Respiratory problems		2	6%
4. Cardiac problems		2	6%
5. Perinatal asphyxia		1	
6. Low birth weight infant		1	
7. Premature infant		1	
8. Hypoglycemia			
9. "Jitteriness"		1	
C. Medical Problems in Infancy or Early Childhood			
1. None		14	
2. Recurrent ear infections		5	
3. Feeding problems		3	
4. Respiratory problems		3	
5. Seizures		3	
6. Head trauma		3	
(a) with concussion	1		
(b) with concussion and skull fracture	1		

The medical history is an important part of the assessment of the child with learning and/or behavioral problems. Risk factors in the perinatal period and early infancy should be documented as possible insults to the central nervous system. Injury to the developing brain may result in seizures, mental retardation, motor problems such as cerebral palsy or more subtle neurological dysfunctions such as perceptual deficits.

Swaiman and Wright[3] stated that the majority of children with learning disabilities do not have a history suggestive of insult to the central nervous system. In our group only six (21%) have a history of a completely normal birth after an uncomplicated pregnancy. Of these six children, only three have a completely normal medical history as newborns and infants. Therefore, only three of our group of 29 (10.5%) have a medical history with no risk factors for central nervous system injury (Table 7). Risk factors in pregnancy included maternal illness, vaginal bleeding, and weight loss. Problems during labor and delivery included premature or post-term labor, prolonged labor, cesarean section, breech presentation and forceps delivery. Medical problems in the newborn period included jaundice, respiratory problems, hypoglycemia, prematurity and low birth weight, among others. As infants many of these children exhibited hyperactivity, colics and feeding difficulties. Health problems in infancy and early childhood seen in some of the children included recurrent ear infections, respiratory problems, seizures and head trauma (Table 7).

Developmental history often gives early clues as to areas of problems resulting in learning difficulties. Children sometime exhibit gross motor delay or a history of incoordination and clumsiness. Fine motor delay was often manifested by problems in buttoning clothes, tying shoelaces, or handling scissors and crayons. A history of language delay is a fairly good predictor of future school problems. In our group of children 11 (38%) had absolutely normal developmental histories. Three of the ten children in the Program who had language delay also had associated motor problems. A general developmental delay was evident in two children since birth and in one child subsequent to an illness and hospitalization at 16 months (Table 8).

Table 8. — Developmental History.

Problem	Number of Children	Percentage
1. Normal Development	11	38%
2. Language Delay	10	34%
(a) Alone	7	21%
(b) With gross motor delay	2	6%
(c) With fine motor delay	1	3%
3. Fine Motor Delay Only	2	6%
4. Gross Motor Delay Only	1	3%
5. Developmental Delay in All Areas	2	6%
6. Other	3	9%
(a) No information	1	3%
(b) Delay in hand preference	1	3%
(c) Normal early development; general delay after illness at 16 months	1	3%

Interventions and strategies • As previously noted, these children exhibited various degrees of intellectual abilities, psycholinguistic characteristics, and academic performance. In spite of that, the methods used in the MDTP classroom have consistently worked even with the many variables of a given child.

The general approach to the child includes providing him or her with a positive, enjoyable experience out of learning. Most of these children have only experienced failure and are not particularly motivated by school. The use of instructional games, including electronic and computer programs, is one of many alternatives used by the MDTP classroom staff. Friendly competition, positive reinforcement and individual encouragement provide some extra motivation for improved performances.

The children themselves are involved in their learning experience by doing independent work, using self-correcting materials and participating in peer tutoring. For children who are easily frustrated and who have a poor self-image, this approach works.

In many children a return to basic skills relearning has been necessary. Educational alternatives involving drill and multisensory programs such as the Fernald approach for reading and the DISTAR programs for reading and math have been successfully used with the children in our group. Working through the different levels of math including going back to the concrete use of manipulatives (such as blocks for numbers) have been useful with children exhibiting severe problems in dealing with math concepts.

"Precision Teaching Techniques" are commonly used in the classroom to monitor drill and practice in reading, spelling and math. The students are timed for their performance in writing or working with math problems. They chart their own performance in graphic form and try to match or improve on their scores from day to day. This method provides velocity in reading and writing which is a valuable asset for higher academic tasks.

Behavior management programs are individually established but include several basic steps: a baseline behavioral profile is obtained by observation in the child's regular classroom setting and in the first few days in the MDTP classroom. Undesirable behavior

such as being off task, out of the seat and talking out are noted. The children are then informed specifically, directly and clearly what the "desirable" behavior is. Positive reinforcement and tangible rewards such as earning points, stars, stickers, playing computer games or having free time are offered to the child for appropriate behavior. Negative behaviors are ignored while expected behaviors are encouraged and rewarded. Our experience in the classroom shows that a consistent and structured behavioral approach has always been successful, even in children with severe behavioral disturbances.

Many of the children who participate in the MDTP classroom have language problems which are dealt with by the teachers and the speech pathologist in the classroom. Commercial programs such as the "Barnell-Taft Series on Following Directions" are used with children with auditory processing deficits. Other programs such as "Getting the Main Idea" are used to help the children learn to recall details.

General principles applied in the classroom for children with language problems include: (1) pairing visual information with auditory information, (2) stressing details verbally, (3) teaching new vocabulary words through categories and instructional games, and (4) using short and clear directions.

Individual speech and language therapy sessions are also provided for children with specific language deficits.

One of the most important facets of the MDTP classroom activity is data collection. The best way to assess a child's improvement or lack of academic growth is by the analysis of his/her performance on a daily basis. Learning rates on specific academic skills are charted in graphic form showing the velocity and accuracy of the child's performance in reading, writing, and mathematical computations. The goal for most children is to increase the speed of performance while decreasing the number of errors. The children chart their own data and usually derive a great deal of motivation and satisfaction in actually seeing their rate of educational growth.

Likewise, behavior management charts are kept for children with behavior problems.

Evaluations of the data and progress charts are done on a periodic basis by the whole MDTP staff and educational and behavior management alternatives are selected as necessary.

The child's academic skills are assessed before and after the MDTP experience. It can then be documented whether the child showed any amount of academic growth (Table 9).



Figure 3.—This student is being timed in a precision teaching "See-say" drill to improve verbal fluency. In the background a child is involved in a one-to-one reading exercise. Note the study carrel used to decrease surrounding visual stimuli in the structured situation.

In our experience with the 29 children who have participated in the MDTP classroom all have demonstrated improvement in academic skills and in their rate of performance including both speed and accuracy. Since the children are of different age and grade levels, standardized appropriate tests such as the Brigance Inventory of Basic Skills are used to finally evaluate the success of the MDTP teaching methods. As can be demonstrated in Table 9 with selected items from the Brigance (pre- and post-test) the educational growth was convincing in every child.

Discussion • The phenomenal success experienced by this regional diagnostic and training program can be attributed to the consistent policy of providing structure, support and success for these underachieving students. Although identified as very difficult children to teach by their school districts, they learned because the environment was good. Figure 3 shows evidence of environmental manipulation of auditory and visual stimuli to control distractibility and short attention spans by the use of study carrels and one-to-one intervention. Each student appears to comprehend what is expected of him and thus understands the rules of the classroom. More important than the environmental controls, however, is the use of instructional techniques called applied behavior analysis and criterion-referenced instruction. Both approaches emphasize the use of direct and frequent measurement, making instructional decisions on the basis of student performance, establishing instructional goals, employing task analysis, keeping records of student performance, and applying the principles of behavior modification. The techniques vary primarily in the frequency of data collection and the type of data collected. In the applied behavior analysis technique, rate data usually are collected daily, and charts are used to record student progress. In criterion-referenced instruction, student performance can be recorded on a checklist, and assessment is based on number (or percent) correct and not on rate. Also the frequency of data collection may vary from daily to weekly. By these methods the student works at his appropriate grade level in all subjects and is able to build on his basal level of knowledge. The child is not exposed to material beyond his capabilities and, thus, he seldom experiences failure.

Support of the child permeates throughout the entire classroom experience. Positive reinforcers are liberally employed for effort and appropriate behavior and performance and the air of enthusiasm and desire exudes throughout the classroom. Almost no punitive manipulative behavior is ever necessary.

By the use of precision teaching techniques, charting, and peer teaching, the student almost always "tastes" success. The student knows he/she is improving and most of the time he is eager to show his chartings. As a matter of fact, the "taste of success" is so embellishing to some children that they resent the intrusion of other disrupting students. Some have gone so far as to inform their new classmates they are disrupting the classroom.

These three classroom characteristics — structure, support and success — are known as the "three S's of education" but they are more than that, they are the essence of motivation. Without any one of the S's, or a combination of them, the student will lose the desire to work or compete; therefore, the structure of the classroom, support of the family and teachers, and success experienced by consistent work are essential to the development of motivation to learn in the classroom. No child, no adult for that matter, will persevere in academic pursuits without having the three S's.

It has been estimated that 10% of school children have speech-language problems severe enough to impede their educational progress. Myklebust[4] showed that many of the 2,704 learning disabled children evaluated by him were defective in cognitive function which involved the conversion of auditory information into visual representation. In our group of 29 children with complex learning problems, 25 (86%) had speech-language difficulties such as reduced ability to process sequential commands. This is a manifestation that the inability to deal with language deficient children is one of the shortcomings of the instruction of complex learning disabled children in the public school systems. Most language programs focus on the linguistic aspects of language and tend to neglect the significant areas of language cognition. In an attempt to ameliorate an integrative disorder of language the MDTP has paid attention to frequency and duration of instruction of language since these seem to be a critical variable in determining whether or not the child progresses. With the realization that failure to develop an adequate language system leads to serious problems during adolescence in nonlanguage areas, such as intelligence and social behavior, one of the full-time teachers in the diagnostic classroom is a trained speech pathologist and language specialist who works every day with each child on integrative language.

An important characteristic of the Multidisciplinary Diagnostic and Training Program is assignment of the pediatrician to the Diagnostic and Training Classroom as well as to the Multidisciplinary Diagnostic Clinic. Traditionally the physician has been very much involved in the initial diagnostic process, but seldom is the physician a part of the treatment and observation of the child in the classroom which has been the private domain of the teacher. With the pediatrician present, the classroom is multidisciplinary and the physician is able to contribute his developmental expertise and pharmacological knowledge to the educational process. This is a marked departure from tradition where so often neurology is committed

Table 9. — Academic Growth as Evidenced by Selected Items from the Brigance*.

Child Number	Items	Percentage of Growth
1	Long Vowel Sounds	60%
	Syllabication Concepts	50%
	Short Vowel Sounds	40%
2	Short Vowel Sounds	40%
	Basic Sight Vocabulary	20%
	Substitution of Initial Cluster Sounds	18%
3	Auditory Discrimination	96%
	Initial Consonant Sounds Visually	71%
	Initial Consonant Sounds Auditorily	52%
4	Long Vowel Sounds	60%
	Digraphs and Dipthongs	30%
	Initial Clusters Visually	27%
5	Vowels	40%
	Writing name	34%
	Lower Case Letters by Dictation	23%
6	Number of Syllables Auditorily	23%
	Short Vowel Sounds	20%
	Direction Words	16%
7	Initial Clusters Auditorily	70%
	Upper Case Letters by Dictation	38%
	Substitution of Initial Consonant Sounds	20%
8	Initial Sounds Auditorily	77%
	Substitution of Initial Consonant Sounds	73%
	Auditory Discrimination	48%
9	Identification of Vowels	80%
	Contractions	34%
	Initial Consonant Sounds	24%
10	Short Vowel Sounds	40%
	Initial Clusters Visually	40%
	Ending Sounds Auditorily	33%
11	Vowel Discrimination	80%
	Sentence Memory	50%
	Visual Memory	20%
12	Numeral Recognition	100%
	Visual Discrimination of Words	100%
	Counting 1-10	89%
13	Vowels	100%
	Long Vowel Sounds	40%
	Basic Sight Vocabulary	29%
14	Vowels	83%
	Common Signs	50%
	Short Vowel Sounds	40%
15	Initial Consonant Sounds Visually	89%
	Short Vowel Sounds	60%
	Basic Sight Vocabulary	24%
16	Ending Sounds Auditorily	24%
	Long Vowel Sounds	20%
	Short Vowel Sounds	20%
17	Auditory Discrimination	100%
	Vowels	100%
	Long Vowel Sounds	40%
18	Spelling-Suffixes	52%
	Long Vowel Sounds	50%
	Abbreviations	32%
19	Substitution of Initial Consonant Sounds	50%
	Recognition of Lower Case Letters	50%
	Short Vowel Sounds	40%
20	Visual-Motor Skills	58%
	Lower Case Letters by Dictation	48%
	Initial Consonant Sounds Auditorily	33%

* Early in the program data were not collected regarding the pre- and post-MDTP performance on the Brigance. One child was too low functioning for this test and another had to be discontinued because of uncooperativeness.

towards diagnosis but seldom involved in the treatment of learning disabled children on a day-to-day basis. This has been particularly valuable in the training of learning disability fellows and pediatric residents who usually have no real understanding of daily teaching methods.

Public Law 94-142 emphasizes that handicapped youngsters should be identified and treated early with special attention paid to their needs. This one year experience with children regarded as being especially difficult to teach has demonstrated that a diagnostic and prescriptive approach of instruction can overcome the multifactorial problems of underachieving in school and the emotional problems of learning disabled children from dysfunctional families. Preliminary data show that multidisciplinary evaluation and instruction can effectively ameliorate many handicapped learning and behavior problems by providing a competent data based instructional program in which structure, support, and success are emphasized.

Through the efforts of the University of Florida College of Medicine, College of Health Related Professions, and College of Education and their commitment toward serving the complex medical, behavioral, and learning disabled children, this program literally brings all the facilities and expertise of the J. Hillis Miller Health Center and the teaching knowledge of the College of Education to the school districts which refer children to the Program. Literally the MDTP has become the vehicle by which the regional concept of service to difficult-to-teach children has been implemented. Children who live in rural counties up to 60 miles away from the University campus have been served on a daily basis and provided the type of educational program which many small school districts are unable to afford. The track record and cooperative efforts between this University and the neighboring counties are now being formed and preliminary data seem to indicate that this is a viable process toward complying with Public Law 94-142.

Summary • The techniques for diagnosis and intervention of children with complex learning disabilities have been described. Through the cooperative efforts of the University of Florida Multidisciplinary Diagnostic and Training Program and the neighboring counties in north central Florida, it has been possible to develop a regional program based on sound educational practices. It has been possible to ameliorate and rehabilitate many of the behavioral problems and learning difficulties of these underachieving children by adhering to a program of structure, support and success. This regional multidisciplinary diagnostic and intervention program is a model of cooperative effort between a major university and multiple school systems which basically brings all of the facilities of the Health Center and College of Education to surrounding school districts to help learning disabled children.

References

1 Clements, S.D.: Minimal Brain Dysfunction in Children: Terminology and Identification, Washington, D.C., PHS Publication 1415, U.S. Department of Health, Education, and Welfare, 1966.
2. Swaiman, K. and Wright, F.: Practice of Pediatric Neurology, Volume II, St. Louis, 1975, p. 884.
3. Ibid., pp. 886-887.
4. Johnson, D. and Myklebust, H.E.: Learning Disabilities: Educational Principals and Practices, New York, Grune & Stratton, 1967.

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Social skills affect quality of life for learning disabled

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ABSTRACT: The fundamental psychological treatment for adequate social and interpersonal skills is a primary need in children and youth with learning disabilities, being more basic than academic skills for a successful life adjustment. Those who have a limited ability to process information require a treatment program which emphasizes development of skills to discriminate in social situations through experiential activities in a variety of real life encounters.

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When I became involved in the learning disabilities field on a daily basis in 1962 with the founding of Anneewakee, a residential treatment facility in Douglasville, Georgia, the general assumption was that learning disabled persons suffered fundamentally from problems of coordination, academic learning and language-processing. Remediation primarily focused on these three areas since the available literature and research encompassed little beyond these factors. However, as the early group of youths identified in the 1950's as learning disabled became young adults, it became apparent that a significant portion were socially and emotionally disabled. They were confused and frustrated by the demands of the poorly understood social environment in which they were forced to negotiate but were unprepared to succeed. Their interpretations and responses to the milieu of their early lives markedly affected the quality and meaning of their adult lives. Critical questions pertinent to basic survival and livelihood were forced. How can learning-disabled students appropriately develop and maintain interpersonal relationships? How will they be able to function and succeed with responsibility on an independent basis? Realistic questions for successful career planning, productive lives and satisfying life experiences were elevated in prominence.

The tasks of adolescent development present difficulties of their own. The added complications brought by a learning disability make the teen's life even more of an awesome proposition. Today's statistics of drug abuse and alcoholism, as well as a suicide rate three times greater than other age groups, clearly delineate the problem. Dr. James E. Strain,[1] President of the American Academy of Pediatrics, said, "Teenage suicide, alcohol-drug abuse, and disease have

grown to such epidemic proportions among America's young people that living to adulthood may be unrealistic for some."

From the beginning, Anneewakee included emphasis on developing positive success experiences in interpersonal skills, career development, academic remediation and emotional functioning in the context of a reality based therapeutic program. Learning just to pass a test was not the focus, though learning to complete, to fulfill and to discover became preeminent. It was important to Anneewakee's founders that disabled youths were offered the opportunity to succeed, even excel, in the normal activities and developmental tasks appropriate to their age. The opportunities were designed to be therapeutically measured, challenging but not overwhelming, and certainly not boring.

In the hundreds of hours spent in counseling learning-disabled youths and their families, I have learned that the child must understand that feelings of self-worth and positive real life experiences are perhaps of greater value than an academic "A". As a result of these hours of dialogue and of watching the teenagers' development at Anneewakee, I noted that older teenagers who had learned basic reading and mathematics skills, had developed techniques of circumventing their learning disabilities, and had mastered appropriate social and interpersonal skills became accepted as "normal" by their peers and employers.

Social Interaction • As they leave formal academic pursuits, older teenagers and young adults seldom have to cope with such problems as those posed by their teachers of Algebra, English, or History. A bright youth will usually find a way around his learning disability if he has achieved basic math and reading skills, and has positive self-esteem and self-confidence. After the school setting, many complicated academic situations that made him feel "not OK" no longer pose a threat to his being "OK" or nondisabled. However, they now face a more complex situation with their social and career adjustment.

If a youth has failed to learn or understand those things necessary for peer and social interaction, he is seriously handicapped throughout his life. Thus, in the final analysis, the social frustrations experienced by many of the learning disabled may be far more serious than the academic dysfunction. A competitive society will accept a misspelled work without comment, but it will not long tolerate social errors, blunders, or misinterpreted signals which lead to more serious circumstances.

When one begins to explore the reasons for the social problems with families of the learning disabled, one quickly realizes how varied and complex is the phenomenon and that the family socialization is only one aspect of a complex social issue. The psychoanalytic concepts indicate that a child who was loved and properly nurtured probably would develop adequate social skills. However, in recent years, social psychologists have begun to analyze and describe more succinctly social behavior in our culture. Now we are beginning to realize the unbelievably complex array of social learning that nondisabled persons acquire, most of which is not consciously taught.

Since learning-disabled persons have difficulty with selective perception, with making associations and with processing events, it appears probable that they will not incorporate the wide gamut of social learning that nondisabled persons acquire. They will not be in a position to separate the hundreds of social cues bombarding them, to judge their importance or to select an appropriate response that involves such complicated signals as body positions, interpersonal distances, facial expressions, voice tone and word selection.

Since many learning-disabled persons fail to learn some of the social signals, they have difficulty constructing an effective successful social repertoire of responses and exchanges. They do not process things as a whole; their social perception of them may be grossly or minimally distorted. Learning-disabled persons can become disturbed by a social situation that ordinarily would present little difficulty to one who does not experience the "learning disability." Generally being self-centered and feeling inadequate, they notice less of what happens to others around them; so once again, their opportunity to experience things and learn from a social setting is less than that of their nondisabled peers. If we hope to be able to teach the hundreds of social skills and nuances that nondisabled persons learn, we must be aware of social learning in normal persons and how they are acquired through each stage of development. "What, when, and how social skills are learned" becomes a new challenge for us. Some schools fail to recognize the importance of learning and reinforcing positive social and vocational skills, believing that older teenage and young adult life adjustment is solely related to successful academic remediation of the child or youth.

Learning-disabled persons typically fail to produce the expected behaviors of a developmental stage; because these people are insecure, they resist the risk of engaging in new developmental stages. The professional community as a whole should begin to develop programs, as we have at Anneewakee, to assist learning-disabled children in acquiring social skills particular to their developmental stages and in enjoying the rewards of each stage of their development. We need parents, teachers and therapists to reinforce behaviors and social skills appropriate for the age and physical maturity of the child or youth. Schools and

inpatient programs which have embraced these concepts confirm their validity and success. In her program for learning-disabled children, Mrs. Tweetie Moore,[2] Director of The New School in Atlanta, Georgia, devotes many hours to developing social skills as well as to remediating the learning disability. While support is critical, it is important to avoid indulgence and "handicapping" expectations. I believe that "unconditional love" can have a detrimental effect on the learning-disabled child as it fosters dependency and self-centeredness. "Conditional love" sets an expectancy, a value system, and an awareness of the needs of others and is therapeutic in the remediation of the learning-disabled child or youth.

Relationships • Because learning-disabled persons generally have difficulty with classifying and analyzing, they often have marked difficulty in developing healthy "other" relationships. This is frequently true within their own immediate and extended families. If they have not learned the concepts of mutuality and trust, they may lack the foundations from which to learn the extended relationships in society. It then becomes important to address understanding the distant degrees of intimacy that permit only a casual interpersonal relationship or a close sharing of oneself. As a result, they may not share much of their thoughts and beliefs with close family members and yet "tell all" to only a casual acquaintance. It may mean that relationships are characterized by manipulation, superficiality, and inconsistency. It is not uncommon for some learning-disabled youths to be in conflict with juvenile and civil authorities.

Normal nonlearning-disabled persons may play many roles in day-to-day interactions. On a given day, one may be someone's child, spouse, parent, employee, or boss. Within each of these relationships, individuals are involved in constant role shifts, sometimes student, sometimes friend, and other times more parent or child. Routinely with nondisabled persons this presents no more than transitory complications, if any.

Research, as well as our staff's experience, indicate that the learning disabled person seems relatively unaware that he can project a role that will determine reactions to himself and that people's response to him is related to the intensity of his affect or behavior. Similarly, the learning-disabled person does not seem to realize or be aware that people are indicating expectations of him by their affect and behavior. Being self-centered, he has somehow failed to notice that messages are sent by personal clothing, body stance, facial and body expression and voice tone. If the learning-disabled person does not perceive when a person, friend or family member wants him to be protective and caring, to be companionable, or to be respectful, they may come to feel he is not a very rewarding person with whom to interact. Thus, he is left alone or disregarded in family and peer interactions and the groundwork is set for him to be a loner, to be treated solicitously, or to be regarded as different. The learning-disabled youth needs consistent social interaction with peers and authority figures if he is to learn who he is and how to relate. Conversely though, due to the "differentness" of his behavior, he receives less opportunities for learning social awareness unless special effort and structure for interaction are established such as special group, role modeling and peer activities.

Researchers such as Anderson,[3] Gillet,[4] and Fafard and Haubrick[5] point out that specific deficits in functional skills, academic achievement, cognitive abilities, and social perception affect the adolescent's self-concept, level of work, and career maturity. These life functioning skills and social perceptions are of major importance as I have seen their effects on long-term goals and on the quality of life of the learning-disabled. The life function skills and social perceptions must be addressed initially in any attempt to remediate learning dysfunctions. The success of this approach is confirmed by our experience in working with such disabled children and adolescents for the past 20 years. A sterile, pure academic effort is frequently unproductive and develops a youth's resistance to books, classes, and teachers because they remind him too vividly of his failures.

Learning life skills must not be artificial; they must be real and involve the normal functions, feeling, activities and movements of the actual social and work situations. It is important that we do not get caught up in occupational and vocational issues of artificial accomplishments. A youth should not be given credit for making a leather wallet when all he really did was lace up a cutout-prepunched kit.

Our staff have noticed that learning-disabled youth referred for treatment who had not previously received functional skill or social awareness training in reality-based environments show a greater severity of disability and resistance to rehabilitation, even though they had special education intervention. Our experience has demonstrated that these same youth — when so structured to participate in social, recreational and on-the-job type experiential vocational training, in conjunction with career exploration — gained in their career maturity, academic skills, motivation to participate in learning and decreased specific areas of severity.

Case Presentation • Anneewakee's staff recently reviewed for discharge a case which is characteristic of many of the learning disabled youths we treat.

Dan began to experience problems in the first grade. His teachers reported that he was unable to grasp the material.

During his second and third grade years he was in constant conflict with his teachers and his grades were failing. He repeated the third grade and his behavior problems became worse. In the fourth grade, he was diagnosed as suffering from a learning disability and placed in learning disability classes through the eighth grade. His program included mainstreaming and other approaches. His behavioral, emotional, and academic difficulties intensified gradually: skipping school, changing grades on his report card, drug experimentation, shoplifting, depression, negative peer grouping, physical violence and low self-esteem. He was expelled from school for smoking marijuana and again for threatening behavior. Attempts at traditional remediation and day services were unsuccessful. Dan was referred to Anneewakee in the ninth grade for treatment and rehabilitation.

Admission evaluations confirmed the learning disability and severe emotional problems. The test results showed his intellectual functioning to be at the sixth percentile and significantly attenuated by emotional problems. These findings were consistent with data collected over the three previous years by his former school.

His 21 months of treatment have included an emphasis on developing self-esteem, self-confidence and awareness. The initial treatment plan focused on strengthening his primitive social perceptions, interpretations and responses which had been neglected by earlier remediation efforts. Academic remediation was offered initially in the context of practical experiences and applied education. Dan's processing of data, instructions and directions improved. He developed through the experiential dimension of the program an understanding of the purpose and value of information. Dan gradually moved into advanced academics and now functions successfully on the appropriate grade level. Presenting behavioral symptoms are currently in remission, and Dan effectively functions in open situations requiring responsibility and judgement. Tests completed one month ago show a significant increase (by 20 points) in his IQ. Additionally, the testing revealed no evidence of the learning disability diagnosed in the fourth grade and confirmed in the admissions process. His current plans include post-secondary education and a technical career. Prognosis: good.

Annewakee has established more than 50 major reality based skills and vocational activities that assist in the development of self-esteem, self-confidence and social maturity in recreational, vocational and social settings. More and more, all concerned with the learning disabled are realizing that teaching academics is only part of the "curriculum" necessary for the social well-being and successful employment of the learning disabled. His ability to feel "OK" to relate successfully with his peers and authoritative figures, and to function adequately in a career, is fundamental and primary.

References

1. Strain, J.E.: Suicides, Drug Use Makes Adulthood an Unrealistic Goal for Many in Teens, The Atlanta Journal, December 12, 1982.
2. Moore,T., Director, The New School, Atlanta, Georgia. Personal Communication, 1982.
3. Anderson, L.E.: The Vocation Kit: Steps in Vocational Readiness for Adults with Hidden Handicaps, 1976, California Association for Neurologically Handicapped Children, Los Angeles, California.
4. Gillet, P.: Career Education for Children with Learning Disabilities, Novato, Ca., Academic Therapy, 1978.
5. Fafard, M.D. and Haubrick, P.A.: Vocational and Social Adjustment of Learning Disabled Young Adults: Follow-up Study, Learning Disabilities Quarterly, 1981, 4, pp. 122-130.

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SPECIAL ARTICLE

A survey of obstetrical practice activity in Florida

O. William Davenport, M.D.

The following article, authored by O. William Davenport, M.D., President of the Florida Obstetric and Gynecologic Society, regarding the recent survey of current obstetrical practice in Florida, clearly indicates the seriousness of the 1983 medical malpractice crisis. The findings answer those who would have you believe that no crisis exists and causes great concern as to the future availability for residents of our state in obtaining qualified persons to deliver their babies.

James W. Walker, M.D.
President, PIMCO

A survey conducted by the Florida Obstetric and Gynecologic Society, in February 1983 to determine the current obstetrical practice activities of Florida obstetricians reveals that 25% of the respondents have completely discontinued the practice of obstetrics and of those physicians who continue to practice obstetrics, 30% are considering stopping their obstetrical services. The number one reason given (62%) was the medical malpractice problem.

Ninety-three percent of the respondents said that they are insured for professional liability and of those who indicated that they are not, 70% said that their reason was that premiums are too high.

This survey indicates that the current professional liability problem is having a definite impact on the practice of obstetrics in Florida. It will also adversely affect the practice of obstetrics in the future if it is not resolved!

Method • The data presented here was collected in a mail-questionnaire survey of the members of the Florida Obstetric and Gynecologic Society and the Florida Fellows of the American College of Obstetrics and Gynecology. Surveys were mailed on February 2, 1983. Responses received through March 9 are summarized.

Of the 698 questionnaires mailed, 439 were returned, a 63% response rate.

The questionnaire consisted of five questions to be answered by checking off alternative answers. Additional comments were received from approximately 100 respondents. Respondents were not required to identify themselves, but were asked to name the county in which they practice.

Results •

I. *Discontinuation of the practice of Obstetrics* — Respondents were asked whether they continue to practice obstetrics. Twenty-five percent of the respondents indicated that they no longer practice obstetrics. Eight physicians said they had limited or reduced their obstetrical practice and two said that they practice obstetrics only on call.

II. *Reasons for discontinuing the practice of Obstetrics* — Respondents who had discontinued, limited or reduced the practice of obstetrics were asked the reasons for doing so. Many physicians had at least two reasons and therefore, percentages of reasons shown in Table 1 exceed 100%.

Table 1. — Percentage of Reasons for Discontinuing the Practice of Obstetrics (for 121 physicians who have discontinued, limited or reduced the practice of obstetrics)

The High Risk Liability Problem	62%
Personal Reasons	61%
Other	21%

III. *Opinion as to receipt of medical services by former Obstetric patients* — Respondents who had discontinued, limited or reduced the practice of obstetrics were asked from whom, in their opinion, their

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former obstetric patients are receiving medical services. Many of the respondents had at least two responses to this question and therefore, percentages of opinions shown in Table 2 exceed 100%.

Table 2. — Percentage of Opinions as to Receipt of Medical Services by Former Obstetric Patients (for 121 physicians who have discontinued, limited or reduced the practice of obstetrics)

From Colleagues in My Practice	40%
From Other Physicians	62%
From Midwives	12%
Unknown	5%

IV. *Anticipation of discontinuation of practicing Obstetrics in the next year or so* — Respondents were asked whether they anticipated stopping obstetrics in the next year or so. Twenty-five percent of the respondents who continue to practice obstetrics said they plan to stop in the next year or so. An additional 17 physicians responded "possibly" or "maybe" to this question. One physician is "considering" doing so and three physicians said that they plan to stop practicing obstetrics sometime in the next several years. Thus, 30% of the respondents who continue to practice obstetrics at the present time are at least considering discontinuing this practice. Fifty-eight percent of the respondents who continue to practice obstetrics said they did not anticipate stopping obstetrics in the next year or so.

V. *Reasons for anticipated discontinuation of the practice of Obstetrics* — Respondents who indicated that they anticipated stopping the practice of obstetrics were asked for their reasons. Some physicians had two or more reasons and therefore, percentages in Table 3 exceed 100%.

Table 3. — Percentage of Reasons for Anticipating Stopping the Practice of Obstetrics (for 99 physicians who are considering stopping)

High Risk Liability Problem	92%
Personal Reasons	24%
Other	8%

VI. *Carry Professional Liability Insurance* — Respondents were asked whether or not they carry professional liability insurance. Ninety-three percent of the respondents indicated that they do carry professional liability insurance. Five percent indicated that they do not.

VII. *Reasons for not carrying Professional Liability Insurance* — Respondents who said they do not carry professional liability insurance were asked their reasons. Seventy percent indicated that premiums are too high; thirty percent said there were other reasons.

VIII. Additional comments — Some of the additional comments written on the questionnaires returned are listed below.

A. For Question 1: Presently I continue to practice obstetrics.

"Hanging on by my fingernails."

". . . I ceased delivery of obstetrics in late 1976 at age 39 anticipating all the problems we now face. I continue to pay the full OB/GYN premium in order to do occasional ABs but will cease that if there is another increase in premiums. Would like to discuss matter with you . . . and other Gainesville colleagues as I do not agree with some of the legislative tactics used."

"(yes,) but getting paranoid about it."

"(yes,) fearfully and defensively."

"Low volume OBs - drastically curtailed."

"Only repeat C/Sections."

"As of 1/1/83."

"Yes, with great trepidation!"

"(yes,) reluctantly."

"Greatly reduced."

"(does continue) but if the high risk liability problem continues, will stop."

B. For Question 2: Discontinued the practice of obstetrics for the following reasons — (1) high risk liability problem; (2) personal reasons; (3) other.

"A combination of reasons but if it were still a rewarding and pleasant experience I would still do obstetrics despite age, etc. I do believe that midwives have contributed greatly to the obstetrician's problems — the carving out of some territory for themselves has come at the expense of the doctors — whom they generally distrust and dislike, and convey same to their patients (clients) — indicative of their mind-set that they should refer to people they treat by a legal rather than medical term."

"High Risk Liability Problem."

"'Burn out' about 1978 - decided to discontinue OB portion of practice."

"Retired from practice of obstetrics and do gynecology only."

"100%!!" (high risk liability problem)

"Social climate."

"Took premature withdrawal from OB because of high risk of suit and personal sacrifices vs. the benefits of continuing OB service."

"Increasing difficulty meeting some patients' demands, guarantees for successful outcomes, etc."

"In 1976."

"10 years ago — before I came to Florida was practicing in Indiana then."

"My associates pulled out of my PA without notice and I felt that I would rather discontinue the OB part of my practice instead of recruiting another associate."

"Semi-retirement."

"Dislike the atmosphere we are put in by the legal profession."

C. For Question 3: I am of the opinion that my former obstetric patients are receiving medical services from — (1) my colleagues in my practice; (2) other physicians; (3) midwives; (4) unknown.

"My former OB patients are seeing other physicians who have lower fees because they either don't carry liability or pay cheaper premiums to other carriers."

"Took premature withdrawal from OB because of high risk of suit and personal sacrifices vs. the benefits of continuing OB service."

D. For Question 4: I anticipate stopping obstetrics in the next year or so — (1) yes; (2) no.

"Possibly, depends on what happens this year. If premiums keep rising I will be forced out even though I love OB and desire to continue it."

"I'm too young to quit. What choice do I have?"

"(yes,) if conditions don't improve."

"I would love to stop because of absurdly high premiums. However, I have only been in practice for a few years and at least 70+ percent of my practice is obstetrics. I can't afford to continue working, neither can I afford to stop."

"(no,) but my OB practice is small."

"Unless premiums are prohibitive."

"(yes,) strictly because of high risk liability problem."

"I plan to stop practicing obstetrics as soon as economically feasible for me to do so."

"Maybe tomorrow."

"I wish I could afford to."

"(other) High cost of malpractice insurance."

"I consider it impossible to continue the practice of obstetrics with the fear we all have that any . . . poor outcome will end up in a lawsuit. OB is not an exact science. I cannot tell all my patients will have 100% good results — it doesn't matter how well trained I am!!!"

"If I do it will be because of lawyers."

"When I can't pass on costs I'll stop OB."

"Sure would like to but unlikely."

"Possibly if malpractice situation worsens."

"I am tired of living under the sword wielded by a pack of blood thirsty, ambulance chasing lawyers. Awards and premiums are utterly ridiculous."

"Yes — high risk total reason."

"I wish I could. The increasing risk of taking care of OB patients has taken the joy out of what once was one of the most rewarding areas of my practice — it's not worth the risk anymore."

"If I were going to stop (could afford to) the reason would be high risk liability problem."

"Would like to."

"If no help coming re: malpractice, may have to anyway."

"I wish I could."

"Becoming a real pain in the rear having to let everyone including the family dog come in for deliveries, pelvic exams and even C/Sections."

E. For Question 5: I carry professional liability insurance — (1) yes; (2) no.

"Only for next year or so if premiums continue to escalate."

"Never believed in it."

"I think I am kidding myself and if I had a multimillion dollar suit on an OB case my carrier would not cover it."

"If rates increase I will probably discontinue malpractice insurance."

"This is one of the reasons I am anticipating stopping OBs in the near future." (premiums too high)

Premiums "too, too, too high."

"Premiums too high and philosophical reasons."

"For two to three years in 76-78 did not carry malpractice insurance."

"(premiums too high) Especially for those of us who practice gynecology only."

"Self-insured to $100,000, then Florida Compensation Fund."

"Insured with self-insurance through USF Medical College."

"Should not be obligatory, i.e., now hospitals making it a condition (requirement) for staff privileges."

"I switched to other carrier because premiums too high. I agree that there is a serious crisis in our county."

"Self-insured $100,000, PCF $10 million reduce to $1 million in 1983."

"Only because it is necessary according to hospital by-laws. I would have had to drop it otherwise as the premium is too high."

"Premiums almost too high to justify carrying insurance."

"Hospital staff privileges require. I, for a time following the 1976 crisis, went 'bare'. Today, with the frequency of suits and costs of defending so high, it is impossible to think of not having insurance. Several colleagues have taken premature retirement to avoid the risk and cost of insurance or have limited themselves to office practice only. I do not know how you would determine the number of these in the state."

"(premiums) already too high."

"Self-insured (group practice) + an umbrella of liability insurance."

"It's hard to pay those high premiums when I do four to eight deliveries a month now. There should be a 'slowing down'

"I would love to stop because of absurdly high premiums. However, I have only been in practice for a few years and at least 70+ percent of my practice is obstetrics. I can't afford to continue working, neither can I afford to stop."

"Only because my hospital requires it."

"Mandatory to be hospital staff otherwise would not carry insurance."

"Yes, but premiums probably will force me to retire."

". . . but with the escalation of awards, no amount is sufficient."

"Have to . . . hospital demands it to be on staff. (There is not enough money in America to satisfy the insatiable demand created by all various parties — consequent to a less than perfect baby . . . often less than perfect due to factors really beyond a doctor's reach.) Why not let patients insure themselves against us rather than our defending ourselves against all comers (i.e. takers)."

"(does carry,) but wish I didn't. Going 'bare' may be the only solution to this problem by removing the incentive for litigation."

"We must do a better job in educating the public about the causes of brain damage and retardation. We need to erase their reflex response that it must've been malpractice."

F. General Comments

"We're throwing money at the problem. We've solved/will solve nothing at our present pace. We need a philosophical change. We simply cannot generate enough money to satisfy."

"If rates go up significantly, I may well quit OB for medicolegal reasons."

"I shall be happy in any way I can to assist in straightening this situation out — I currently review many OB claims from Hillsborough, Broward and Dade counties — call me. Something definitely has to be done."

"Two sons in medical school — they were thinking of joining me but now will go to dermatology and radiology."

"If the malpractice climate does not get better or gets worse in the next few years I will stop. It will be too costly $100-200 per OB patient if things continue to go as they are."

"As malpractice insurance costs increase, so will my OB fees."

". . . Have no intention of going bare if I can possibly avoid it. Am referring high risk to university medical center."

"I stopped OB in 1975." (this respondent did not answer any questions.)

"We must do a better job in educating the public about the causes of brain damage and retardation. We need to erase their reflex response that it must've been malpractice."

"My son, who is in practice with me, does not deliver babies mainly because of the malpractice crisis."

"I anticipate more paramedical (midwives) care than m.d.s — it's sad."

". . . suit in Ft. Pierce probably triggered suit against us by some lawyers (similar wording in suit) . . ."

"The future is uncertain and the above represents only the current year."

"They're always too high anyway." (premiums)

"I have not been in private practice for a long time. We younger practitioners are having a particularly hard time meeting our malpractice payments, while trying to attract new patients with OB rates that end up being much higher than we'd like to charge . . . this premium is really a hardship during low volume build-up years."

"Cost passed to patients."

"There must be an answer to malpractice premiums — perhaps the residency programs should be upgraded."

Conclusions •

I. Over half of trained and certified obstetrician/gynecologists in the state of Florida have stopped or plan to stop obstetrics in the near future.

II. The severe liability problem is the principle cause of this development.

III. Newly trained obstetricians will not be able to afford the high premiums for insurance and therefore will probably locate in other states, join the armed forces or "go bare".

IV. Although there was not a question as to whether or not the respondents felt that professional liability insurance premiums are too high, approximately six percent of the respondents checked the reason "premiums too high" for Question 5, even though they answered that they do carry professional liability insurance.

Questions to be answered •

I. Who will be delivering obstetrical care in Florida within five years?

II. Will the State Legislature enact the current Florida Medical Association program of tort reform which would give some relief of the liability problem?

III. Can mediation panels be re-established that will survive constitutional scrutiny?

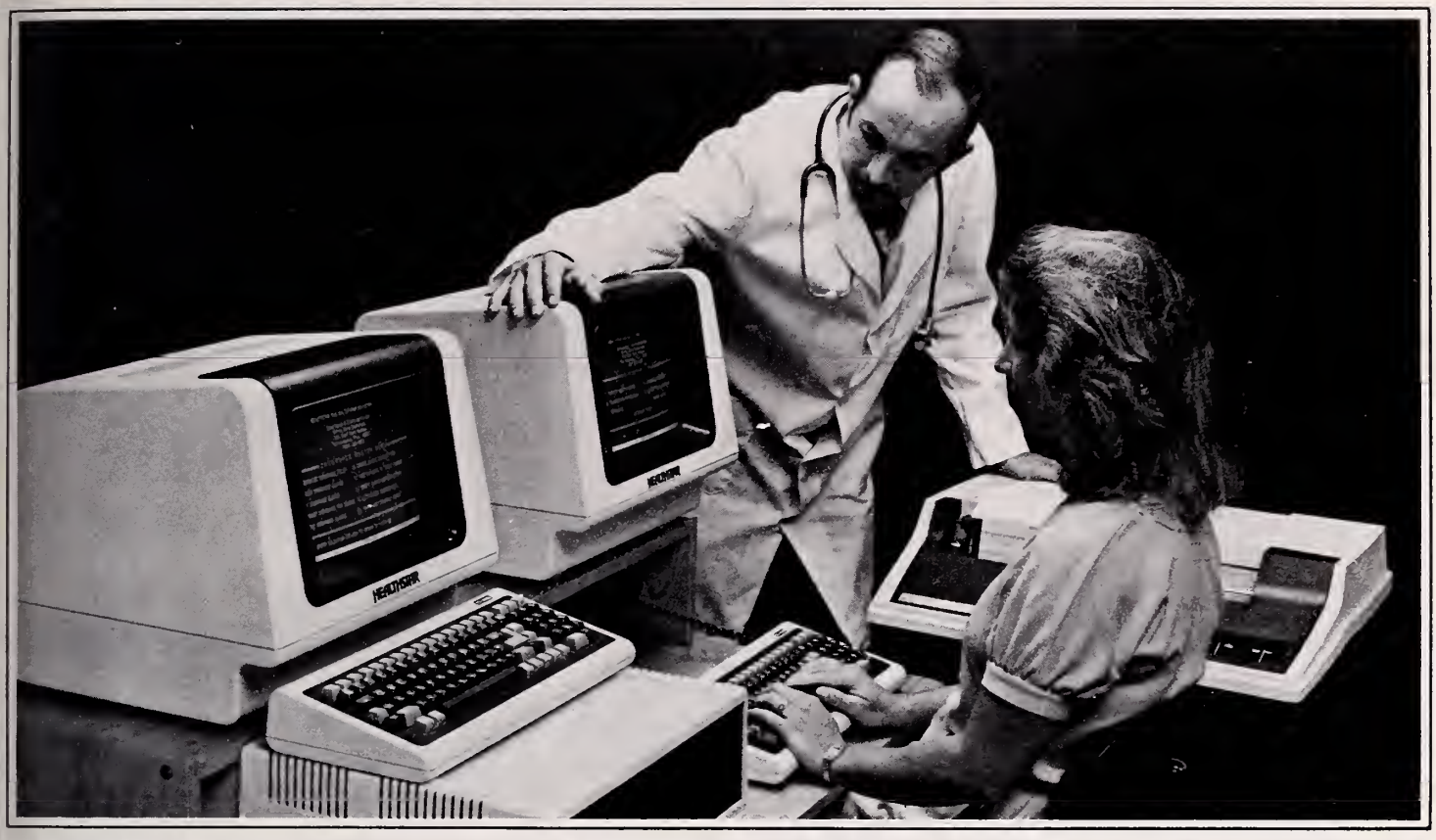
IV. Will the newly formed division of the American College of Obstetricians and Gynecologists develop some answers that will help in the defense of brain damaged infants' claims?

V. Should we advocate a "Hospital admission insurance" on all hospitalized patients that would function in "no fault" types of awards for all injured patients?

These are desparate times that seem to call for drastic measures in the near future. It is strongly urged that all physicians, and particularly obstetricians and gynecologists, make every effort to find an answer to these questions in a positive way.

● Dr. Davenport, 8700 N. Kendall Dr., Miami 33176.

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References: 1. Royer GL, Jr, Moxley TE, Hearron MS, et al: *J Int Med Res* 3:158-171, 1975. 2. Royer, GL, Jr, Moxley TE, Hearron MS, et al: *Curr Therap Res* 17:234-248, 1975. 3. Brackertz B, Busson M: *Brit J Clin Pract* 32:77-80, 1978. 4. Tausch J, Fasching U: *Brit J Clin Pract: A symposium supplement, IXTH European Congress of Rheumatology*, Wiesbaden, Germany, Sept 2-8, 1979, pp 53-61. 5. Lanza FL, Royer GL, Jr, Nelson RS et al: *Dig Dis & Sci* 24:823-828, 1979. 6. Pavelka K, Susta A, Vojtisek A et al: *Rheumatol and Rehab* 12:68-73, 1973. 7. Tretenhahn W: *Brit J Clin Pract: A symposium supplement, IXTH European Congress of Rheumatology*, Wiesbaden, Germany, Sept 2-8, 1979, pp 45-52. 8. Cardoe N: Curr Med Res & Opinion 3:518-520, 1975.

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Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

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Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

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DRUG INTERACTION: *Coumarin-type anticoagulants*: The physician should be cautious when administering Rufen to patients on anticoagulants.

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ADVERSE REACTIONS: **Incidence greater than 1%. Gastrointestinal**: The most frequent adverse reaction is gastrointestinal (4 to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). Central Nervous System: dizziness*, headache, nervousness. Dermatologic: rash* (including maculopapular type), pruritus. Special Senses: tinnitus. Metabolic: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS). *Incidence 3% to 9%.

Incidence less than 1 in 100. Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. Central Nervous System: depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma. Dermatologic: vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome and alopecia. *Special Senses*: hearing loss, amblyopia (blurred and/or diminished vision, scotomata and/or changes in color vision) (see PRECAUTIONS). Hematologic: neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs' positive), thrombocytopenia with or without purpura, eosinophilia, decreases in hemoglobin and hematocrit. Cardiovascular: congestive heart failure in patients with marginal cardiac function, elevated blood pressure. Allergic: syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis, bronchospasms (see CONTRAINDICATIONS). Renal: acute renal failure in patients with preexisting significantly impaired renal function, decreased creatinine clearance, polyuria, azotemia, cystitis, hematuria. Miscellaneous: dry eyes and mouth, gingival ulcers, rhinitis.

Causal relationship unknown. Gastrointestinal: pancreatitis. Central Nervous System: paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri. Dermatologic: toxic epidermal necrolysis, photoallergic skin reactions. Special Senses: conjunctivitis, diplopia, optic neuritis. Hematologic: bleeding episodes. Allergic: serum sickness, lupus erythematosus syndrome, Henoch-Schonlein vasculitis. Endocrine: gynecomastia, hypoglycemia. Cardiovascular: arrhythmias (sinus tachycardia, bradycardia, and palpitations). Renal: renal papillary necrosis.

OVERDOSAGE: Acute overdosage, the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit.

DOSAGE AND ADMINISTRATION: Rheumatoid arthritis and osteoarthritis, including flareups of chronic disease. Suggested dosage 400 mg t.i.d. or q.i.d.

Dysmenorrhea: 400 mg every 4 hours as necessary.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for the relief of pain. *Do not exceed 2,400 mg per day.*

CAUTION: Federal law prohibits dispensing without prescription.

FLORIDA MEDICAL

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NOTES & NEWS

JFMA wins Sandoz award

The Journal of the Florida Medical Association, Inc. has been awarded first prize in the State Medical Journal category of the eighth annual Sandoz Medical Journalism Competition. The East Hanover, N.J. pharmaceutical company notified Daniel B. Nunn, M.D., Editor, in early March and arranged to present the $500 award at the 109th Annual Meeting of the FMA.

Craig D. Burrell, M.D., Vice President of Sandoz reported that the award was based primarily on good design and writing. In addition, judges considered titles and typography, cover design, captions, photography, make-up and style.

Rules of the contest require the submission of three issues and the August, October and November 1982 issues were submitted. The August issue highlighted the history of medicine in Florida. The October issue featured an article on the 500 renal transplants performed at the University of Florida between 1966 and 1982. November's lead article entitled, "The Meal-Ticket Syndrome", dealt with masked dependency reactions of the middle years.

Dr. Nunn expressed gratitude to the dedicated physicians who have assisted in the continuous editorial review process as well as the Editorial Staff of the JFMA and the many contributing authors.

109th ANNUAL MEETING

Scientific program complete

The 109th Annual Meeting of the Florida Medical Association is complete. Headlining the scientific program is the FMA sponsored symposium "Health Care Team, Interact '83", Thursday afternoon, May 5th. Calvin W. Martin, M.D. Chairman of the Committee on Medical Education and Orris O. Rollie, M.D., Chairman of the Subcommittee on the Annual Meeting Scientific Program encourage all members to attend this outstanding program. Representatives of five health professions will present their viewpoints on the role of their profession vis-a-vis the medical doctor.

President Robert E. Windom, M.D., will serve as program moderator and President-Elect J. Lee Dockery, M.D. will present a summary of the physician viewpoint.

As in the past, 20 hours of Category I CME credit will be available to program registrants. See you in Hollywood at the Diplomat Hotel, May 4-8, 1983.

Listed below is the complete scientific program. Specific times for each topic and room assignments will be included in the program manual provided to each registrant.

FLORIDA MEDICAL ASSOCIATION SYMPOSIUM

"THE HEALTH CARE TEAM, INTERACT '83"

(Sponsored by FMA Committee on Medical Education)
Thursday, May 5, 1983 — 1:30 p.m.to 3:00 p.m.
Robert E. Windom, M.D., Sarasota
Moderator
J. Lee Dockery, M.D., Gainesville
Co-Moderator

"**Nursing,**" Bobbie S. Huges, R.N., A.R.N.P., Member, Board of Directors, Florida Nurses Association, Mt. Sinai Hospital, Miami Beach.

"**Pharm. D.,**" Raymond W. Roberts, Pharm. D., Director of Pharmaceutical Services, Riverside Hospital, Jacksonville.

"**Physical Therapy,**" Cheryl Hill, P.T., President, Florida Chapter, American Physical Therapy Association, Davie.

"**Respiratory Therapy,**" Carol J. Miller, R.R.T., M.S., President, Florida Society of Respiratory Therapy, Chairperson, Department of Respiratory Therapy, Miami-Dade Community College, Miami.

"**Social Work,**" Louis Feuer, M.A., M.S.W., Immediate Past President, Society for Hospital Social Work Directors, Director, Social Work Department, Cedars of Lebanon Health Care Center, Miami.

SECTION ON ALLERGY AND IMMUNOLOGY

(Co-sponsored by Florida Allergy and Immunology Society)
Saturday, May 7, 1983—8:25 a.m. to 12:30 p.m.
Frederick L. Bloom, M.D., Sarasota
Program Chairman

Welcome—Thomas M. Brill, M.D., President, Florida Allergy and Immunology Society, Gainesville.

"**Pharmacokinetics of Theophylline Part II,**" Saber Samaan, Ph.D., Assistant Professor of Medicine, Division of Allergy and Clinical Immunology; University of South Florida College of Medicine, Tampa.

"**Red Tide (Ptychodiscus Brevis) Toxin; A Possible New Asthma-Triggering Mechanism,**" Richard F. Lockey, M.D., Director of

Allergy and Immunology, V.A. Hospital; Associate Professor, Division of Allergy and Immunology, University of South Florida College of Medicine, Tampa.

"Drug Allergy: Assessment," Timothy Sullivan, M.D., Chief Allergy Section, Department Internal Medicine, University of Texas Health Science Center, Dallas, Texas.

"Aeroallergen Survey of Tampa Bay Florida, Three year Study," Gerry Bucholtz, M.D., Assistant Professor, Division of Allergy and Immunology, V.A. Hospital, University of South Florida College of Medicine, Tampa.

"Significance of Florida West Coast Aeroallergens," Mary Jelks, M.D.; Chairperson, Pollen and Mold Committee, American Academy of Allergy and Immunology; Sarasota.

Break and Informal Discussions.

"Clinical Problems Secondary to T-cell Dysfunction," R. Lawrence Siegel, M.D., Ph.D., Department of Pediatrics and Medical Microbiology-Immunology, University of South Florida College of Medicine, Tampa.

"Drug Allergy: Management," Timothy Sullivan, M.D., Associate Professor, Chief Allergy Section, Department Internal Medicine, University of Texas Health Science Center, Dallas, Texas.

All speakers for discussion.

Educational Objectives:

I. *Target Group:*
The educational program of the Florida Allergy and Immunology Society is open to all physicians, but over the past years has been predominately attended by members of this society and other physicians having an interest in this area. The discussion is targeted primarily to allergists and clinical immunologists, although the information is valuable to general physicians, family practitioners, pediatricians, internists, pulmonary specialist, and otorhinolaryngologists amongst the other specialties.

II. *Educational Areas:*
A. Basic science/immunology:
Our programs in the past and this year will present new information and new understandings in the basic science of immunologic mechanisms in this relatively new and rapidly exploding field, how these new understandings relate to some old clinical problems for which mechanisms were unknown, and to new clinical problems such as the epidemic of tumors and unusual infections now occurring amongst select populations.
B. Clinical Allergy:
Reports of studies being done at Florida medical schools further defining which aeroallergens are of importance to patients with allergic disease here in Florida will be presented. This has great clinical relevance and is thought to be very valuable by the attendees each year, and does influence the way in which each physician practices. This is one area in which physicians gain new insights which affect the day to day practice of clinical allergy.

III. *Educational Processes:*
A. Didactic lectures by recognized experts in these various fields.
B. Questions and answers following each lecture so that participants can ask specific questions of these experts.
C. Panel discussion in which the experts will discuss and/or debate or respond to ideas or questions from other speakers, or from those in the audience.
D. There will be a coffee break for free time for further in-depth discussion in small groups which often is the most valuable part of these meetings.

SECTION ON CHEMICAL DEPENDENCY

(Co-sponsored by Florida Medical Foundation Committee on Impaired Physicians)
Firday, May 6—8:00 a.m. to 11:00 a.m.
Dolores A. Morgan, M.D., Miami
Program Chairman

Welcome, Guy T. Selander, M.D., Chairman, Florida Medical Association/Florida Medical Foundation Committe on Impaired Physicians.

"Poly-Drug Abuse Complications in Alcoholism Treatment," Douglas McDonald, M.D., Director, Donwood Institute, Toronto, Canada.

Break

"The Influence of Addictive Substances on Genetic Bioengineering," Richard J. Warren, Ph.D., President & Director, Genetics Associates, Inc.

Discussion

Educational Objective: This program will effectively broaden the physician's knowledge of poly-drug abuse and its effects on the unborn infant.

SECTION ON CHEST MEDICINE

(Co-sponsored by Florida Chapter, American College of Chest Physicians, and Florida Thoracic Society)
Thursday, May 5—1:00 p.m. to 4:00 p.m.
Mark Snider, M.D., South Miami
Adam Wanner, M.D., Miami Beach
Program Chairmen

"Pulmonary Vascular Disease"

"Recent Advances in the Treatment of Pulmonary Hypertension," Tahir Ahmed, M.D.

"Controversies in the Prevention and Treatment of Pulmonary Emboli," David Solomon, M.D.

"Interactions Between Respiration and Circulation," Robert A. Wise, M.D.

Educational Objectives: The educational objective of this three lecture series is to provide both the pulmonary and non-pulmonary physician information on various forms of pulmonary vascular pathophysiology utilizing a progressively sophisticated information format. At the completion of the program the attending physicians should have sufficient knowledge to diagnose and if not manage, understand the present state of the art management, of the patient with pulmonary vascular disease.

SECTION ON COLON AND RECTAL SURGEONS

(Co-sponsored by Florida Society Colon and Rectal Surgery)
Friday, May 6—1:30 p.m. to 5:30 p.m.
Shed Roberson, M.D., Ormond Beach
Program Chairman

"Colon and Rectal Surgery"

"Screening for Colo-Rectal Cancer", William Ferrante, M.D., Chairman, Department of Gastroenterology, Ochsner Clinic, New Orleans, Louisiana.

"Colonoscopy Update", John Christie, M.D., South Miami.

"Fifteen Ways to Use the Foley Catheter in Colon and Rectal Surgery", Emmet Ferguson Jr., M.D., Jacksonville.

"Office Treatment of Hemorrhoids", Harvey Shub, M.D., Orlando.

"Hospital Treatment of Hemorrhoids", Matthew Larkin, M.D., Miami.

Break

"Adjuvant Radiotherapy in Sphincter-saving Surgery for CA of Rectum", Gerald Marks, M.D., Professor of Surgery, Jefferson Medical College, Philadelphia.

"Proctologic Potpourri" (panel), Moderator, Shed Roberson, M.D.; Panel: Gerald Marks, M.D.; Matthew Larkin, M.D.; Harvey Shub, M.D.; and William Ferrante, M.D.

Educational Objectives: To educate the colo-rectal surgeon on the various methods of diagnosing and treating anorectal disorders, screening for colo-rectal cancer, using colonoscopy and adjuvant treatment of carcinoma of the rectum with irradication.

At the completion of these lectures, the physician should understand the topics better and be able to apply the principles in clinical practice.

SECTION ON DERMATOLOGY

(Co-sponsored by Florida Society of Dermatology)
Friday, May 6—3:00 p.m. to 5:00 p.m. and
Saturday, May 7—9:00 a.m. to 12:30 p.m.
Phillip Frost, M.D., Miami
Program Chairman

Friday, May 6

"Dermatopathology—Cases of Special Interest" Arkadi Rywlin, M.D., Director Pathology and Laboratory Medicine Services, Mount Sinai Medical Center of Greater Miami; George Ioannides, M.D. Professor of Pathology, University of Miami School of Medicine and Clinical Professor of Pathology, Emory University School of Medicine.

Saturday, May 7

"Effects of Spironolactone on Hamster Sebaceous Glands" Jeffrey Bowden, M.D., Mount Sinai Medical Center of Greater Miami.

"HLA Antigens in Elderly Men with Kaposi's Sarcoma" Richard A. Johnson, M.D., Mount Sinai Medical Center of Greater Miami.

"Epidemic Kaposi's Sarcoma and AID (Part I)" Marcus A. Conant, M.D., Associate Professor of Dermatology, University of California School of Medicine, San Francisco, California.

Break

"The Effects of Topically administered Corticosteroids on the Response to UVB in Patients with Psoriasis" Bernard Nusbaum, M.D., Mount Sinai Medical Center of Greater Miami.

"Topical Therapy with Corticosteroids" Richard B. Stoughton, M.D., Professor of Dermatology, University of California School of Medicine, San Diego, California.

"Epidemic Kaposi's Sarcoma and AID (Part II)" Marcus A. Conant, M.D.

"Lymph Node Metastases in Relation to the Histology of Primary Melanoma Lesions" Arthur Weissman, M.D., Mount Sinai Medical Center of Greater Miami.

Educational Objectives: The objective of this session in dermatology is to provide the information necessary to recognize and care for patients with Kaposi's Sarcoma in the elderly and in the young homosexual population; it is also to provide information concerning the proper diagnosis and prognosis of malignant melanoma lesions; it is also to provide information on the proper use of corticosteroids in the therapy of psoriasis and other diseases; and, finally to explain the effects of certain drugs on these sebaceous glands.

SECTION ON ENDOCRINOLOGY

(Co-sponsored by Florida Endocrinc Socicty)
Friday, May 6—8:00 a.m. to 10:45 a.m.
Edward B. Biederman, M.D., Ft. Lauderdale
Program Chairman

"Thyroid Update"

"Thyroid Function Tests," Marguita Zakarija, M.D., Associate Professor of Medicine, University of Miami School of Medicine.

"Graves Disease," J. Maxwell McKenzie, M.D., Professor of Medicine; Chairman, Department of Medicine; Chief, Division of Endocrinology & Metabolism, University of Miami School of Medicine.

"Thyroiditis," Robert C. Farese, M.D., Professor of Medicine; Chief of Endrocrinology, University of South Florida School of Medicine.

Panel Discussion, participants: Drs. Zakarija, McKenzie, and Farese.

Educational Objectives: To enable the General Practitioner or Internist to properly diagnose and treat patients with Graves's Disease and thyroiditis.

SECTION ON FAMILY MEDICINE

(Co-sponsored by Florida Academy of Family Physicians)
Thursday, May 5—1:30 p.m. to 4:30 p.m.
Jack E. Giddings, M.D., Jacksonville
Program Chairman

"Role of Family Physician in Sports Medicine," Peter Indelicato, M.D., Team Physician University of Florida Athletic Association Assistant Professor & Director, Sports Medicine, Department of Orthopedics, University of Florida College of Medicine, Gainesville.

"Working the Front End (Prevention)," Joseph Brownholz, Ed.D., Associate Professor, Department of Health, Physician Education & Receation, University of Miami, Miami.

"Management of Common Sports Injuries," Dr. Peter Indelicato.

"The Exercise Prescription," Dr. Joseph Brownholz.

Educational Objective: The Family Practice Section is designed to (1) provide information on the use of exercise, nutrition, and lifestyle by the family physician in preventive patient care; (2) identify the role of the family physician in sports medicine; (3) update information on treatment on common sports injuries and; (4) provide practical lectures tailored so that material and topics presented are useful as well as interesting.

SECTION ON FAMILY MEDICINE AND INTERNAL MEDICINE

(Co-sponsored by Florida Academy of Family Physicians and Florida Society of Internal Medicine)
Saturday, May 7—9:00 a.m. to 10:30 a.m.
Jack E. Giddings, M.D., Jacksonville and
Yank D. Coble, Jr., M.D., Jacksonville
Program Co-Chairmen
Joint Session on Medico-economic Topic

"Health Care, Hospitals and Medicine" M. Keith Weikel, Ph.D.

Educational Objective: The objective of this program is to examine the scope of relationships between hospitals and physicians in the future delivery of health care to the people of Florida.

SECTION ON GASTROENTEROLOGY AND NUCLEAR MEDICINE

(Co-sponsored by the Florida Gastroenterologic Society and the Florida Association of Nuclear Physicians)
Friday, May 6—8:00 a.m. to 11:00 a.m.
Howard Manten, M.D., Miami
Stephen P. Rosenthal, M.D., Miami
Program Chairmen

"Scintigraphic Localization of GI Bleeding," S. P. Rosenthal, M.D.

"ERCP and PTC," H. D. Manten, M.D.

"Hepatobiliary Scintigraphy," R. S. Fisher, M.D.

Break

"Dysphagia and Heartburn," A. I. Rogers, M.D.

"Scintigraphic Evaluation of Esophageal, Gastroesophageal and Gastric Motor Function," R. S. Fisher, M.D.

"Pediatric Gastrointestinal Scintigraphy," G. N. Sfakianakis, M.D.

Panel Discussion—A. N. Serafini, M.D., Moderator, R. S. Fisher, M.D.; H. D. Manten, M.D.; A. I. Rogers, M.D.; S. P. Rosenthal, M.D.; G. N. Sfakianakis, M.D.

Educational Objectives: The educational objective of this session is to enable Gastroenterologists, Internists, Surgeons and General Practitioners to understand the role of Radioisotope Imaging procedures in the evaluation of patients with Hepatobiliary Disease, Esophageal Dysfunction, Gastric Motility Abnormalities and Lower Gastrointestinal Bleeding in Adults and Children. Endoscopic, Radiologic and Clinical Correlation will be provided. Physicians completing this program will have a working knowledge of the clinical relevance and the proper utilization of Esophageal, Gastroesophageal, Gastric and Hepatobiliary Radioisotope Imaging procedures.

SECTION ON INTERNAL MEDICINE

(Co-sponsored by the American College of Physicians, Florida Region and the Florida Society of Internal Medicine)
Wednesday, May 4—1:00 p.m. to 4:15 p.m.
Roy H. Behnke, M.D., F.A.C.P., Tampa
Program Chairman

"Multidisciplinary Approach to the Critically Ill Medical Patient"

"Management and Assessment of the Respiratory Status," Keith Chandler, M.D., Assistant Professor of Medicine, Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, University of South Florida College of Medicine.

"Assessment of the Cardiac Function," Gene L. Colice, M.D., Assistant Professor of Medicine, Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, University of South Florida College of Medicine, and Director, Medical Intensive Care Unit, James A. Haley Veterans Administration Hospital, Tampa.

Discussion

"Coagulation and Platelet Problems," Hussain I. Saba, M.D., Clinical Assistant Professor of Medicine and Director, Division of Hematology, Department of Internal Medicine, University of South Florida College of Medicine.

"Infections and their Management," John F. Breen, M.D., Clinical Assistant Professor of Medicine, Division of Infectious and Tropical Diseases, Department of Internal Medicine, University of South Florida College of Medicine.

Discussion

Educational Objectives: The critically ill medical patient often poses such a myriad of problems of such complexity that no one physician is able to subserve all problems. Upon the completion of this course the physician-student should more clearly understand the major complications in such critically ill patients and to understand the kind of specialized expertise individual disciplines bring to that understanding. Included are the assessment of major systems, to heart and lungs, and diagnosis and management of derangements of these systems. Infection and coagulation disorders, commonly encountered, will be similarly assessed and their management outlined.

SECTION ON NEONATAL-PERINATOLOGY

(Co-sponsored by Florida Neonatal-Perinatal Society)
Thursday, May 5—1:30 p.m. to 4:30 p.m.
K. S. Kanarek, M.D., Tampa
Program Chairman

Introduction, K. S. Kanarek, M.D., Associate Professor of Pediatrics, Section of Neonatal Medicine, University of South Florida College of Medicine, Tampa.

"Support for the Laboring Mother in Improving Neonatal Outcome," Roberto Sosa, M.D., Director, Neonatal Regional Intensive Care Unit, All Children's Hospital, St. Petersburg.

"Development of a Neonatal Nurse Practitioner Program," Donald Garrison, M.D., Assistant Professor of Pediatrics, Division of Neonatology, University of Florida College of Medicine, University Hospital, Jacksonville.

"Solace for Grieving Parents," Patricia M. Lagrua, M.S.N., Clinical Specialist in Research Associate, Department of Neonatology, All Children's Hospital, St. Petersburg.

"Factors Influencing Developmental Outcome," Susan Widmayer, Ph.D., Assistant Professor of Pediatrics and Psychology, University of Miami School of Medicine, Miami.

Educational Objectives: The educational objective of this program is to acquaint the practicing physician involved in maternal and infant care with the allied health professional resources that are available. This information should assist him in managing the mother in labor, the ill neonate, in counseling parents and assessing the graduates of the Neonatal Intensive Care Unit.

SECTION ON NEUROSURGERY

(Co-sponsored by Florida Neurological Society and Florida Neurosurgical Society)
Saturday, May 7—9:00 a.m. to 11:30 a.m.
Donald Mellman, M.D., Tampa and
William Ertag, M.D., Naples
Program Chairmen

"Pathology of Aneurysms," Michael Norenberg, M.D., Professor of Neurology and Pathology, Director of Neuropathology, University of Miami School of Medicine, Miami.

"Radiology of Aneurysms," F. Reed Murtagh, M.D., Clinical Assistant Professor of Radiology, University of South Florida College of Medicine, Tampa.

"Techniques of Aneurysm Surgery," Ralph Rydell, M.D., Clinical Associate Professor of Neurosurgery, University of South Florida College of Medicine, Tampa.

"Complications of Aneurysm Surgery," Larry Page, M.D., Professor of Neurosurgery, University of Miami School of Medicine, Miami.

"Current Concepts of Medical Management of Aneurysms," Myron D. Ginsberg, M.D., Professor of Neurology, Director of the Cerebral Vascular Disease Research Center, University of Miami School of Medicine, Miami.

Educational Objectives: The educational objectives of this course is to enable the neurological specialist to learn and understand the latest concepts in the medical and surgical management of the patient with an intracranial aneurysm.

SECTION ON OBSTETRICS AND GYNECOLOGY

(Co-sponsored by the Florida Obstetric and Gynecologic Society)
Saturday, May 7—8:00 a.m. to 12:00 noon
O. William Davenport, M.D., Miami
Program Chairman

"Prenatal Vitamin Supplements; Frequency of Neural Tube Defects-Human and Hamsters," John A. White, M.D., Fellow in OB/GYN-University of Florida.

"Current Role of Dog Labs in OB/GYN Surgical Teaching," Rex E. Stubbs Jr., M.D., Resident-University Hospital of Jacksonville.

"Spontaneous Vaginal Delivery After Cesarean Section; Factors Which Predict Success," Donald C. Whiteside, M.D., Fellow in OB/GYN-University of Florida.

"Management of Herpes in Pregnancy," Pawan K. Rattan, M.D., Fellow, Division of Maternal-Fetal Medicine, University of South Florida.

"Investigation of Micro-Trauma Following Sexual Intercourse," Mark K. Norvell, M.D., Resident-University Hospital of Jacksonville.

Break

"Carcinoma In Situ of the Vulva," Donald E. Marsden, M.D., Fellow in Gynecologic Oncology, University of South Florida.

"Investigation and Laser Treatment of Non-invasive Lesions of the Cervix," Bernd Uva Sevin, M.D.

"Diagnosis and Management of Multiple Gestations," Jose C. Scerbo, M.D., Assistant Professor-Division of Maternal-Fetal Medicine, University of South Florida.

"Vaginal Cancer After Hysterectomy for Benign Disease," Jeff Bell, M.D., Fellow in OB/GYN-UM/JMH Medical Center.

"Ovarian Cancer After Hysterectomy for Benign Disease," Moises Lichtinger, M.D., Fellow in OB/GYN-UM/JMH Medical Center.

Educational Objectives: The educational objective of this program is to offer a forum for the presentation of current research from medical education and training programs which will provide an avenue between the academic community and the practicing physician. Major topics to be addressed include data on gynecological maligancy and an update on known entities in obstetrics and gynecology.

SECTION ON OCCUPATIONAL MEDICINE

(Co-sponsored by Florida Occupational Medical Association)
Friday, May 6—1:30 p.m. to 5:30 p.m.
Charles Fitzgerald Jr., M.D., Winter Park
Program Chairman
"Why Work Matters"

Welcome—Course Objectives, Charles Fitzgerald, M.D.

"Health Screening and Wellness at Work," Charles Fitzgerald, M.D., Prohealth Corporation, Winter Park.

"Benefits and Risks at Work," Nick Alexiou, M.D., Chairman Occupational Medicine, University of South Florida, Tampa.

Break

"Psychiatry and Psychology at Work," Maurie Pressman, M.D., Medical Director, Horizon Hospital, Clearwater.

"Limitations and Opportunities at Work," Van Brewster, M.D., Florida Power Corporation, St. Petersburg.

Discussion and invitation to join FOMA (Florida Occupational Medical Association)

Educational Objectives: The educational objectives are to reemphasize and show the important relationship between individual's health and work and to demonstrate that participation in occupational health programs provides physicians distinct and unique opportunities not available in private settings.

Upon completion of this program, a physician will understand the opportunities available through occupational medicine and how to use this advantage in order to improve the health care for employees under his supervision and his private patients.

SECTION ON CLINICAL ONCOLOGY

(Co-sponsored by Florida Society of Clinical Oncology, Florida Radiological Society in cooperation with the American Cancer Society)
Friday, May 6—11:00 a.m. to 5:00 p.m.
Michael Troner, M.D., Miami
Program Chairman
"The Management of Colorectal Carcinoma"

Registration, Program Moderator—Michael B. Troner, M.D., Chairman.

"Surgeon's Approach to Rectal and Colon Carcinoma," Edward M. Copeland III, M.D., Chairman, Department of Surgery, University of Florida, College of Medicine, Gainesville.

"Radiation Therapy in the Management of Rectal Carcinoma," Ralph Dobellbower, M.D., Department of Radiation Therapy, Medical College of Toledo, Toledo, Ohio.

"The Role of Adjuvant Chemotherapy in Rectal and Colon Carcinoma," Howard Lessner, M.D., Clinical Professor, Department of Oncology, University of Miami School of Medicine, Miami.

"Post Operative Radiation Therapy in Colorectal Carcinoma: A Series of 102 Patients Treated in the Community," Herbert Brizel, M.D., Chief Radiation Therapy, Hollywood Memorial Hospital, Hollywood. Clinical Professor of Radiology, University of Miami School of Medicine, Miami.

Panel Discussion by Speakers

Presentation of poster session of selected abstracts.

Educational Objective: The most appropriate surgical, radiotherapeutic and chemotherapeutic management for patients with colon and rectal carcinoma.

SECTION ON OPHTHALMOLOGY

(Co-sponsored by Florida Society of Ophthalmology
Saturday, May 7—8:00 a.m. to 12:00 noon
(At the Bascolm Palmer Eye Institute)
William W. Culbertson, M.D., Miami
Program Chairman

"Management of Peripheral Corneal Disease," William W. Culbertson, M.D., Assistant Professor of Ophthalmology, Bascolm Palmer Eye Institute.

"Management of Corneal Perforation," Sidney H. Mandelbaum, M.D., Assistant Professor of Ophthalmology, Bascolm Palmer Eye Institute.

"Management of Post Operative Astigmatism," Mark S. Gorovoy, M.D., Medical Director, Southwest Florida Eye Bank, Ft. Myers.

Break

"Office Laboratory Investigation in External Disease," Seth Cutler, M.D., Ft. Lauderdale.

"Psuedophakic Corneal Edema and its Management," Henry Gelender, M.D., Assistant Professor of Ophthalmology, Bascolm Palmer Eye Institute.

"Indications, Complications, and Results in Penetrating Keratoplasty," Richard K. Forster, M.D., Professor of Ophthalmology, Bascolm Palmer Eye Institute.

Discussion

Educational Objectives: Ophthalmologists completing this course should be better able to understand corneal disease, the latest treatment techniques available for the types of problems. A variety of new techniques will be learned thus enlarging the spectrum of the general ophthalmologist.

SECTION ON ORTHOPEDICS

(Co-sponsored by Florida Orthopedic Society)
Friday, May 6—1:00 p.m. to 6:00 p.m.
Saturday, May 7—8:00 a.m. to 11:00 a.m.
Jerry E. Enis, M.D., Miami
Program Chairman

FLORIDA ORTHOPEDIC STATE OF THE ART - 83
1st Clinical Session
Friday, May 6

Opening Remarks: C. L. Wilson, M.D., President, Florida Orthopedic Society; Jerry E. Enis, M.D., Miami, Program Chairman; David S. Teperson M.D., Hollywood; Local Arrangements

"Carbon Dioxide Laser: Microsurgical Repair of Soft Tissue," D. K. Dew, Research Assistant, University of Miami School of Medicine, Miami.

"Clinical Experience with Co_2 Laser in Orthopaedic Surgery," John J. Jennings, M.D., Miami.

"Fixation of Fractures in Children," Marshall Horowitz, M.D., Jacksonville.

"Perspective in Scoliosis," Harry Shufflebarger, M.D., Miami.

Break

"Chymopapain—Somethin New," Richard G. Onkey, M.D., and Ralph E. Peterson, M.D., Naples.

"Surgical Compliance in Universal Hip Replacements," Charles Weiss, M.D., Miami Beach.

"Status of Unicompartmental Knee Replacements—100 Case Follow up," William R. Kennedy, M.D., Sarasota.

"Instrumentation in Total Knee Replacement," J. Allen Lacey, M.D., Winter Park.

"Proportional Stem Design in a Total Hip System," Jerry E. Enis, M.D., Miami.

"Florida Orthopedic State of the Art—1983," William E. Burkhalter, M.D., Guest Speaker, Professor of Orthopedic Surgery; Vice Chairman of the Department of Orthopedics & Rehabilitation; Chief, Division of Hand surgery, University of Miami School of Medicine, Miami.

Saturday, May 7

"Research Update—Osteoarthritis Femoral Head," Wallace E. Miller, M.D., and David S. Howell, M.D., Miami.

"Diagnostic Difficulties with Low Grade Chondrosarcomas," Arthur Walling, M.D., Tampa.

"Intradiscal Therapy—Chymopapain or Collagenase," Mark D. Brown, M.D., and John M. Lockwood, M.D., Miami.

"Gas Gangrene—Case Presentation & Review of the Literature," Todd D. Moldawer, M.D., Orlando.

"Patella Tendon Bearing Cast Revisited," James M. Ray, M.D., Orlando.

"Myocutaneous Flaps in Orthopaedics," Raj Bhole, M.D., Orlando.

Educational Objectives: The orthopedist will receive an update on the state of the art in orthopedics in Florida in 1983. A wide range of topics have been listed to meet the varying continuing educational needs of the practicing physician.

SECTION ON PATHOLOGY

(Co-sponsored by Florida Society of Pathologists)
Friday, May 6—1:00 p.m. to 5:00 p.m.
Kip Amazon, M.D.
Program Chairman

"Origin, Purpose and interesting Observations, Florida Lymphoma Study Group," Gerald Byrne, M.D.

"Children's Cancer in Florida," William Donally, M.D.

Break

"The Acquired Immunodeficiency Syndrome," Margaret Fischl, M.D.

Educational Objectives: The educational objective of this program is to make the pathologist aware of various new developments in the staging and treatment of malignant lymphomas and childhood malignancies and the clinical and pathologic aspects of the AIDS Syndrome.

SECTION ON PEDIATRICS

(Co-sponsored by The Florida Chapter of the American Academy of Pediatrics and The Florida Pediatric Society)
Friday, May 6—1:00 p.m. to 3:45 p.m.
Thomas M. Zavelson, M.D., Gainesville
Program Chairman

"Respiratory Tract Infections, Diagnosis and Treatment," Gerald M. Loughlin, M.D.

"Reactive Airway Disease, Recent Updates," Robert H. Cohan, M.D.

Roundtable Discussion—Pediatric Pulmonary Disease.

Educational Objectives: The educational objectives will be to enable the general pediatrician to acquaint himself with recent medical advances in reactive airway disease at a level of understanding sufficient to better care for the patient with such a condition, as well as to pass related questions found in the recertification exam of the American Board of Pediatrics.

SECTION ON PEDIATRIC CARDIOLOGY

(Co-sponsored by Florida Association of Pediatric Cardiology)
Saturday, May 7—8:00 a.m. to 11:30 a.m.
Arthur S. Raptoulis, M.D., Orlando
Program Chairman

"Update Pediatric Cardiology 1983"

"Recent Advances in Surgical Correction of Congenital Heart Disease," George R. Daicoff, M.D., Clinical Professor of Surgery, University of South Florida School of Medicine.

Panel Discussion, participants: James A. Alexander, M.D., Professor of Surgery, University of Florida School of Medicine and Gerald A. Kaiser, M.D., Department of Surgery, University of Miami School of Medicine.

"Pediatric Intensive Care,: Invasive and Noninvasive Hemodynamic Monitoring," James A. Alexander, M.D.

Panel Discussion, participants: Ben Guedes, M.D., Clinical Assistant Professor, University of Florida School of Medicine; Director of Medical Education, Department of Pediatrics, Orlando Regional Medical Center and Agustin Ramos, M.D., Clinical Assistant Professor of Pediatrics, University of Florida School of Medicine, Attending in Pediatric Cardiology, Orlando Regional Medical Center, and Arthur S. Raptoulis, M.D.; Clinical Associate Professor of Pediatrics, University of Florida School of Medicine, Head Division of Pediatric Cardiology, Orlando Regional Medical Center.

Break

"Cardiac Electrophysiologic Evaluation—Indications and Techniques," Michael L. Epstein, M.D., Professor of Pediatrics, Division of Pediatric Cardiology, University of Florida, Gainesville School of Medicine and Grace S. Wolff, M.D., Associate Professor of Pediatrics, Department of Pediatrics, University of Miami School of Medicine.

Discussion

Educational Objectives: The program is to enable a general pediatrician to become acquainted with and understand the indications for surgical procedures utilized in Pediatric Cardiology. The second objective is to enable the general pediatrician, the pediatric cardiologist and/or pediatric intensivist to become

aware of new techniques in hemodynamic and noninvasive monitoring of pediatric patients in an intensive care setting. A third objective deals with invasively investigating supraventricular and ventricular dysrhythmias. This portion of the program will enable pediatric cardiologists to rationally avail themselves and their patients of the services currently available to them in the State of Florida for evaluation of these dysrhythmias. The general practitioner will benefit in much the same way.

SECTION ON PHYSICAL MEDICINE AND REHABILITATION

(Co-sponsored by Florida Society of Physical Medicine and Rehabilitation)
Saturday, May 7—9:00 a.m. to 11:00 a.m.
Sterling H. Huntington, M.D., Boca Raton
Program Chairman

"Development of Didronal (Etidronate Disodium) use in Heterotropic Ossification in Paget's Disease and Traumatic Conditions," William C. Fleming, M.D., Professor, Department of Rehabilitation Medicine, University of Alabama, Birmingham.

Educational Objective: This program is aimed at all physicians treating Paget's Disease, spinal cord injuries, and hip replacements as well as fractures, to enable them to acquire better knowledge of this new drug, its use and complications in our every day practices. This program will be aimed basically at Physiatrists, Orthopedists, and Neurologists.

SECTION ON PLASTIC AND RECONSTRUCTIVE SURGERY

(Co-sponsored by Florida Society of Plastic and Reconstructive Surgeons)
Saturday, May 7—8:00 a.m. to 11:00 a.m.
M. Felix Freshwater, M.D., Miami
Program Chairman

"Medical Malpractice Loss Prevention for the Plastic Surgeon"

"Loss Experience of Plastic Surgeons with PPTF," Robert E. White Jr., Director of Claims and Loss Prevention Physician Protective Trust Fund, Miami.

"Plaintiff Attorney's View of Malpractice," Edward N. Winitz, J.D., LL.M., Professor of Law and Medicine, Nova University Law Center, Partner, Winitz, Liroff & Kolsky, Miami.

"Defense Attorney's View of Malpractice," Joel R. Wolpe, J.D., Partner, Wolpe & Leibowitz, Miami.

"How to Protect Your Assets From Judgments," Allen Hecht, Partner, Fine, Jacobson, Block, Klein, Colan & Simon, Miami.

Educational Objectives: The educational objectives are to enable the practicing plastic surgeon to identify those risk factors making him liable for medical malpractice and deal with a medical malpractice suit if preventive measures are unsuccessful.

SECTION ON PREVENTIVE MEDICINE

(Co-sponsored by Florida Society of Clinical Oncologists)
Thursday, May 5—1:30 p.m. to 5:30 p.m.
E. Charlton Prather, M.D., Tallahassee
Program Chairman

"Programming for Pregnancy by the Local Health Departments," Stephen H. King, M.D., Staff Director, Health Program Office and State Health Officer.

"A Prenatal Protocol for Local Health Departments," June M. Atkinson, M.D., M.P.H., Director, Lake County Health Department.

"Hepatitis B: Serodiagnosis and Prevention Via Vaccine," Jeffrey J. Sacks, M.D., M.P.H., State Epidemiologist.

"Hospitals and Health Departments in Epidemic Control," Lucille B. Emberton, RN, M.A., Nurse Epidemiologist, University Community Hospital, Tampa.

"Cervical Actinomycosis," Betty J. Vaughn, M.D., Clinical Director, Orange County Health Department.

Educational Objectives: The planned scientific session for the annual meeting of the Florida Society for Preventive Medicine encompasses a potpourri fo five topics timely to current concerns of preventive medicine practitioners.

From Dr. King's presentation, attendees will learn the administrative and fiscal ramifications of initiating prenatal programming for indigent women within the context of an operating local health unit. They will learn the several things required for the successful beginning of programming for meeting medical needs of pregnant, indigent women.

Dr. Atkinson's presentation will provide the "recipe" for the medical surveillance of pregancy—to include management, from the health department point of view, of deviations from normal.

Dr. Sacks will clarify the serodiagnosis of Hepatitis B Virus (HBV) infection. The at-risk population and sequelae of HBV will be elucidated. The benefits, risks and procedures of HBV vaccine programs will be discussed. Attendees can expect to receive information critical to their role as public health leaders in their respective communities with regard to advising on the use of HBV vaccine.

Ms. Emberton expects to provide the attendees with practicable techniques for morbidity data sharing between county health units and hospitals for early detection of rising incidents and the mutual use of these data control of acute communicable conditions within the community setting.

Only within the past 24 months has cervical actinomycosis been recognized as a condition needful of special attention by family planning clinics and gynecologists. Dr. Vaughn has given very special attention to the matter in her family planning clinics at the Orange County Health Department. She proposes to describe her experience and present practicable procedures for suspecting, detecting and satisfactorily treating cervical actinomycosis. The condition is not rare in her practice among indigent women of Orange County.

SECTION ON PSYCHIATRY

(Co-sponsored by South Florida Psychiatric Society, Inc.)
Saturday, May 7—8:00 a.m. to 12:10 p.m.
James J. Goodman, M.D., Miami
Program Chairman

I. Update on Psychopharmacologic Treatment

"Update on Anxiety and Antianxiety Agents," Roberto A. Dominguez, M.D.

"Update on Depression and Antidepressants," Abraham Flemenbaum, M.D.

"Psychopharmacologic Drug Interactions," Susan S. Moreno, M.D.

"How Should Non-psychiatrists Use Psychotropic Drugs," Ramon A. Boza, M.D.

Panel Discussion

Break

II. Patients with Special Problems-Adolescents and the Elderly

"The Psychiatric Problems of Adolescents," Lowell Rosman, D.O.

"Divorce—Impact on the Family," Fred Seligman, M.D.

"The Organic and Demented Patient," Jack Skigen, M.D.

"An Internist Looks at the Medical Problems of the Aged," William Reefe, M.D.

Panel Discussion

Educational Objectives: This program is intended to acquaint the primary care physician with:

A. Current, theoretical and practical knowledge of psychopharmacologic treatment, and treatment of special categories of patients.
B. Treatment of anxiety and depression with pharmacologic agents.
C. Psychiatric problems of adolescents and the impact of divorce on the family.
D. Psychiatric management of organic and elderly patients.
E. Medical problems of the aged.

SECTION ON RADIOLOGY

(Co-sponsored by Florida Radiological Society, Inc.)
Friday, May 6—1:00 p.m. to 4:00 p.m.
Saturday, May 7—9:00 a.m. to 12:00 noon
Martin L. Silbiger, M.D., Tampa
Program Chairman

"New Techniques in Vascular and Nuerologic Radiology"

Friday, May 6

Vascular Interventional Radiology

"Results of Renal Angioplasty: Case Selection and Long-term Follow-up," Peter Sones, M.D., Chief, Section of Angiography, Emory University Clinics and Emory University School of Medicine, Atlanta.

"Ileofemoral Angioplasty: Techniques and Results," Thomas Black, M.D., Director, Division of Angiography, Tampa General Hospital and Clinical Assistant Professor, Department of Radiology, University of South Florida College of Medicine, Tampa.

"Coronary Angioplasty: Case Selection and Results," Peter Sones, M.D.

Saturday, May 7

Neuroradiologic Techniques

"Percutaneous Biopsy Techniques and Spinal Cord Puncture," Robert Quencer, M.D., Director, Division of Neuroradiology, Department of Radiology, Jackson Memorial Hospital and University of Miami School of Medicine, Miami.

"High Resolution Computerized Tomography of the Orbit," Robert Quencer, M.D.

"Radiologic Evaluation of Facet Disease and Facet Injection Techniques in Focal Spinal Pain Syndromes," Reed Murtagh, M.D., Director, Section of Neuroradiology, Tampa General Hospital and Clinical Associate Professor, Department of Radiology, University of South Florida College of Medicine, Tampa.

Educational Objectives: With the recent development of new techniques in radiology, it is imperative that the practicing radiologist knows the indications, contradictions, complications and results of these methods.

At the completion of this course, the radiologist should understand which patients will benefit from interventional radiologic procedures and which patients would be better treated with other established medical and surgical techniques.

SECTION ON RHEUMATOLOGY

(Co-sponsored by Florida Society of Rheumatology)
Thursday, May 5—1:45 p.m. to 5:30 p.m.
Paul H. Bridgeford, M.D., St. Petersburg
Program Chairman

"Current Concepts in Rheumatoid Arthritis," William J. Koopman, M.D., Professor of Medicine, and Director of the Division of Clinical Immunology and Rheumatology, University of Alabama in Birmingham.

"Dermatologic Manifestations of Rheumatic Disease," Neal S. Penneys, M.D., Ph.D., Professor of Dermatopathology, University of Miami School of Medicine.

"Psoriatic Arthritis," Frank B. Vasey, M.D., Associate Professor of Medicine, Division of Rheumatology, University of South Florida College of Medicine.

"Current Concepts in Immunology," William J. Koopman, M.D.

Educational Objectives: At the completion of this series of lectures, physicians with an interest in rheumatic disease should be able to:

A. Understand and be able to apply in every day practice the most recent developments and ideas in the pathophysiology, diagnosis and treatment of rheumatoid arthritis.
B. Effectively recognize and diagnose the various skin diseases that occur in conjunction with rheumatic conditions.
C. Take care of a patient with psoriatic arthritis, including differential diagnosis, pathophysiology, use of various treatment modalities available at the present time, in addition to managing the social and psychological implications of the disease.
D. Understand latest developments in the field of immunology and how this may be practically applied to every day practice of medicine.

SECTION ON SURGERY (ICS)

(Co-sponsored by International College of Surgeons)
Saturday, May 7—10:00 a.m. to 12:00 noon
Robert Hux, M.D., Leesburg
Program Chairman

"Current Surgical Approach to Peptic Ulcer Disease," J. Patrick O'Leary, M.D., Professor of Surgery, Vanderbilt University, Nashville, Tennessee.

"Impact of Nutrition and Malnutrition on the Surgical Patient," J. Patrick O'Leary, M.D.

Educational Objective: The physician learner will receive an update and rewiew to prepare him to more effectively approach peptic ulcer disease surgically and provide nutritional management of the surgical patient.

SECTION ON SURGERY (ACS & FLAGS)

(Co-sponsored by Florida Chapter, American College of Surgeons, and Florida Association of General Surgeons)
Friday, May 6—2:00 p.m. to 5:00 p.m.
David H. Shapiro, M.D., Belleair
and William H. Meyer Jr., M.D., Fort Pierce
Program Chairmen

"Recent Advances in Transplantation Surgery," Thomas Starzl, M.D., Professor of Surgery at the University of Pittsburg School of Medicine.

Resident Paper Competition. Presentation of three surgical resident papers, one from each Florida Medical School as judged by a committee of the Chapter.

"Recent Legislative Decisions Affecting Medical Litigation in Florida," James W. Walker, M.D., President; and John Thrasher, Esquire, Attorney for Professional Insurance Management Company. (PIMCO)

Educational Objectives: This will be of benefit not only to the surgeons regarding the advances in this field in this subspecialty of surgery, but to all physicians as well since it will define the pioneer efforts of this most famous man in the field and will define the future as well. Certainly the biology of transplantation surgery has opened a door to understanding of immunosuppression in general and should be of benefit to all who attend.

Objectives and goals of having two principle members of our PIMCO organization define new legislative advances is of utmost importance to all physicians in Florida and following the mandate of the headquarters of the American College of Surgeons this is incorporated into the program to include matters of socioeconomic interest in our deliberations.

The resident papers competition is designed to stimulate a close relationship between the American College of Surgeons in Florida and its future surgeons in training in our three medical schools.

SECTION ON THORACIC AND CARDIOVASCULAR SURGERY

(Co-sponsored by Florida Society of Thoracic and Cardiovascular Surgeons)
Friday, May 6—1:00 p.m. to 4:00 p.m.
Gordon F. Moor, M.D., Lakeland
Program Chairman

"Management of Thoracic Surgical Infections"

"The Use of Musculo-cutaneous Flaps in the Management of Median-sternotomy Wound Infections," John Boswick, M.D., Emory University School of Medicine, Atlanta.

"Management of Mediasternal Deep Wound Infections Following Cardiac Surgery," Gerard Kaiser, M.D., Dept. of Cardiothoracic Surgery, University of Miami School of Medicine.

"The Present-day Management of Empyemas Complicating Thoracic Surgical Procedures," Richard Thurer, M.D., Division of Cardiothoracic Surgery, University of Miami School of Medicine.

Discussion.

Educational Objectives: The educational objective will be to apply the latest, up-to-date methods in the management of superficial and deep wound infections following cardiac surgery and in the management of empyemas complicating thoracic surgical procedures.

SECTION ON UROLOGY

Saturday, May 7—9:00 a.m. to 11:00 a.m.
Michael P. Small, M.D., Miami
Program Chairman

"Microscopically Controlled Surgical Excision (MOHS CHEMOTHERAPY) for Treatment of Penile Carcinoma," Henry Menn, M.D., Professor, Department of Dermatology and Cutaneous Surgery, University of Miami School of Medicine.

Pyelogram Conference

Educational Objectives: The educational objective of Dr. Henry Menn's lecture for our annual meeting is to teach Urologists alternative surgical methods for treating cancer of the penis possbily circumventing the need for radical penile surgery.

DEAN'S MESSAGE

What price, Medicine. . .

A few days ago, a newspaper reporter telephoned to interview me concerning the development of the Medical Education Council of the Hospital Cost Containment Board. This new group is composed of Board members from the Hospital Cost Containment Board, representatives from the Florida Medical Association, and representatives from each of the medical schools in Florida.

In the course of the interview, the reporter asked if physicians were knowledgeable about the costs of medical care. My reply was, of course, in the affirmative. Then I posed a question to the news reporter, "If your mother was seriously ill, what kind of medical care would you want for her?" The reporter's response was "the very best (pause), but at the lowest cost!"

Therein lies a problem! Everyone wants health care costs to decrease in a generic sense, but when loved one are ill, we want the very best. The very best is not the least expensive!

There are many ingredients in health care costs. Physician fees are one of the ingredients but not the largest one. Let's examine a few other parts of the health care puzzle: (a) debt service on construction; (b) indigent care which costs money, but the cost is passed on to the patients who pay, a sick tax — this could be well over $100 per day; (c) demands for high-technology diagnostic and therapeutic devices; (d) payroll — this is at least 50% of a hospital's budget; (e) escalating costs of supplies; (f) increasing costs for utilities, particularly electricity and fuel oil; and finally, (g) medical liability insurance premiums. It is a wonder that health care costs are not higher!

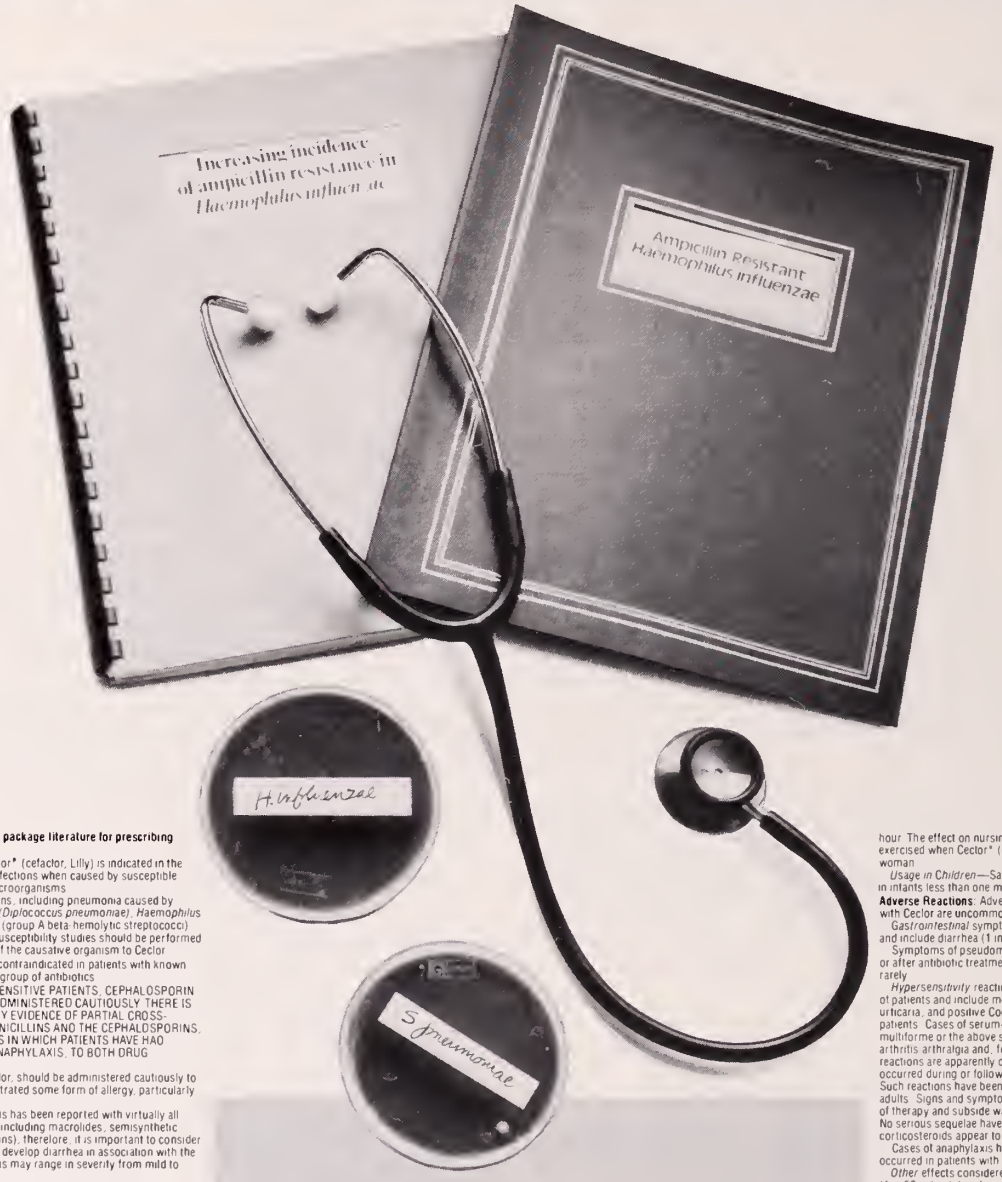
As physicians, we do need to be aware of costs as do hospital administrators, hospital boards, nurses, technicians, patients, and even new reporters. More important, the public needs to know the genesis of these costs. For example, patients expect their health insurance policies to be all inclusive and become critical when the insurance does not pay all costs. Overutilization by holders of non-deductible policies is another stimulus to increased costs. Also, ever changing and ever more stringent Life Safety Codes for hospitals have added enormously to construction costs and, consequently, the debt service of those hospitals.

Physicians are receiving the criticism for the rising health care costs. We must take the leadership and inform the public from Anchorage to Key West about the multiple factors that compose "health care costs."

There is no substitution for the truth.

William B. Deal, M.D.
Dean, College of Medicine
Associate Vice President
for Clinical Affairs
University of Florida
Gainesville

An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor
Pulvules®, 250 and 500 mg

Brief Summary Consult the package literature for prescribing information

Indications and Usage: Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions*—If an allergic reaction to Ceclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers—Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.15 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor* (cefaclor, Lilly) is administered to a nursing woman.

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations of SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

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*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.*

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

References

1. Antimicrob. Agents Chemother., 8:91, 1975.
2. Antimicrob. Agents Chemother., *11*:470, 1977.
3. Antimicrob. Agents Chemother., *13*:584, 1978.
4. Antimicrob. Agents Chemother., *12*:490, 1977.
5. Current Chemotherapy (edited by W. Siegenthaler and R. Luthy), p. 880. Washington, D.C.: American Society for Microbiology, 1978.
6. Antimicrob. Agents Chemother., *13*:861, 1978.
7. Data on file, Eli Lilly and Company.
8. Principles and Practice of Infectious Diseases (edited by G. L. Mandell, R. G. Douglas, Jr., and J. E. Bennett), p. 487. New York: John Wiley & Sons, 1979.

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

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PINE CREST

A Boarding and Day School
Fort Lauderdale

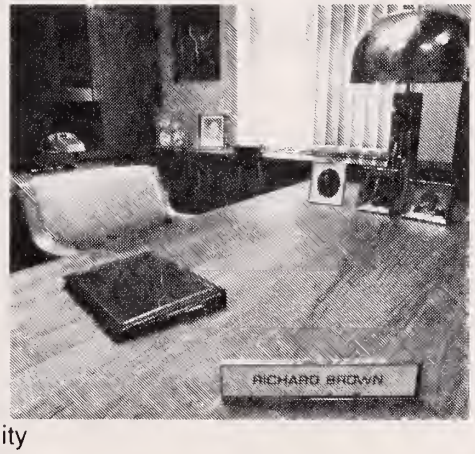
- Pine Crest is an accredited college preparatory school, founded in 1934, with a boarding program (five or seven days) for boys and girls in grades 7-12, located on a modern, 47-acre campus on the northern edge of Fort Lauderdale.

- The program of study presents traditional academic preparation for college entrance in English, foreign language (German, French and Spanish), mathematics, laboratory science (two years of chemistry, two years of biology, physics, astronomy and marine biology), and history. Pine Crest also has a Fine Arts Department (band, chorus, dance, drama and studio art) and an Institute for Civic Involvement. Advanced Placement courses are offered to outstanding students who wish to study college-level work while still enrolled in a high school environment. Pine Crest offers 9 formal AP courses and students may prepare independently for AP exams in several other subjects.

- Students have the opportunity to compete on 56 athletic teams including school and USS swimming teams. Tennis is under the direction of a resident pro who uses the school's ten courts.

- For more information, please contact Dr. John Harrington, Pine Crest Box M, 1501 NE 62 Street, Fort Lauderdale 33334, phone 305-492-4103. Pine Crest has a policy of non-discriminatory admissions in all programs.

Richard Brown thought he was too young to have a heart attack. He wasn't.



Because having a family, a good job and a bright future doesn't protect anyone from heart attack. In fact, nearly one million Americans — many with those assets — die of heart disease and stroke each year. And 200,000 of them die "too young."

The American Heart Association is fighting to reduce early death and disability from heart disease and stroke with research, professional and public education, and community service programs.

But more needs to be done.

You can help us support research and education by sending your dollars today to your local Heart Association, listed in your telephone directory.

American Heart Association

WE'RE FIGHTING FOR YOUR LIFE

Sourcebook on food and nutrition

By Ioannis S. Scarpa, Ph.D.; Helen Chilton Kiefer, M.D., Ph.D.; and Rita Tatum (eds.), 560 pages, Marquis Professional Publications, Chicago, June 1982.

This is the third edition of the *Sourcebook*, which delivers a series of articles with an extensive reference list of resources. These 82 well written articles were selected from a data base of 5,000 articles and represent a variety of journals from the scientific to the popular. Many persons who find nutrition worth writing about are heard from, such as Food Technologists, Dietitians, Consumers, Food Manufacturers, Physicians and Government Agencies. Their diversity aside, they have commonly found interesting ways of presenting timely topics. Some of the sample topics addressed are: the National Nutrition Policy, Success of the Nutri/System Weight Loss Centers, Food Safety, Vitamins, Sweeteners, Athletic Needs, the Cholesterol Controversy and the use of Fiber with Diabetics. There are many more topics covered as this book contains three sections, which are: "Dietary Directions in the '80's," "Nutrition from Conception to Adolescence," and "Adulthood into the Golden Years." These sections are followed by "Resources for Further Information."

Most notably the resource information is not just three or four pages supplementing the articles, but is 154 pages which are just as detailed as lengthy. It gives the names of food and nutrition related colleges, associations, and manufacturers, complete with address, phone number and contact persons. Also included is a list of universities in the U.S. and Canada that offer degrees in nutrition and food science. There is also included a key accrediting agency acronyms and information on the grant support programs in food science, agriculture and nutrition. Not to be left out, the magazine industry has a publication that puts together a list of available magazines covering food and nutrition. This is a handy, extensive collection of resources that could be just what the librarian, nutrition educator or food scientist would like to put their finger on.

This is not intended to be a nutrition textbook for undergraduates, but is best used by those practicing in the field of nutrition. The consumer should have the background in nutrition when reading this selection of articles as these were chosen for their variety and demonstrate the diversity of thought and issues alive in the nutrition field today. There were some topics that were not selected such as hyperalimentation and under adolescence—the increasing problems of anorexia and bulemia. It seemed also one-sided to discuss the success of the nutri/system while no articles on weight management from "not-for-profit" programs sponsored by dietitians and doctors were selected. The absence of these important topics and others do not dampen its purpose which is to whet your appetite with a Reader's Digest version of some interesting writings on nutrition so that you can go on to use the provided sources to come to your own conclusions.

James J. Cerda, M.D.
Gainesville

● Dr. Cerda is Professor and Associate Chairman, Division of Gastroenterology and Nutrition, University of Florida College of Medicine.

FMAA convention

The FMAA Convention Committee composed of Gloria Nunn, President; Priscilla Gerber, President-Elect; Russ Berge, FMAA Executive Director; Jane Eberly, FMAA Convention Chairman along with FMA Executive Director Don Jones and Bob Harvey, Associate Executive Director met recently at the Diplomat Resort and Country Club in Hollywood Beach to finalize plans for the 1983 FMAA Annual Convention to be held May 4-8, 1983, concurrent with the 109th Annual Meeting of the Florida Medical Association.

Early arrivals on Wednesday can plan to attend a lecture from an antiques expert from 2-4 p.m. Anne Gilbert is an author, nationally syndicated columnist and a professional appraiser; she has appeared on the Phil Donahue Show.

The first House of Delegates will be held at 8:25 a.m. on Thursday, May 5 and the Second House of Delegates will convene at 2:00 p.m. immediately following our Annual Awards Luncheon which will also honor our past presidents. We will feature informal modeling from a variety of boutiques during the luncheon.

The Flampac luncheon will be held on Saturday, May 7 and will not only add enjoyment but political insight. Your spouse will receive all the pre-registration and full agenda information in our special "Call to Convention" newsletter that will be sent out to all auxilians. The Art Show information will be included in that letter also. We ask you to encourage her to attend.

Our Hospitality Room, located on the Mezzanine level, will be open from 12-4 Wednesday, 8-4 Thursday and 8-11 on Saturday. Please stop by and pay us a visit. Enjoy the homemade goodies, say hello or plan to meet your spouse or friend.

Jane Eberly
Lighthouse Point

Florida Medical Association Auxiliary, Inc.
Elected Officers 1982-1983

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Roche salutes the history of Florida medicine

THE ICE MAN OF APALACHICOLA



Dr. John Gorrie

Medical history is replete with statistics regarding deaths from fever, and before the middle of the 19th century, little could be done to aid the afflicted. Yellow fever, smallpox, typhoid and scarlet fever were scourges that came in epidemics and caused rapid elevation of body temperature from which, all too often, the victim died.

Even for sunstroke patients, lowering body temperature—when attempted at all—was rough and crude treatment consisting of dunking the victim, often fully clothed, into cold water.[1]



Patented invention

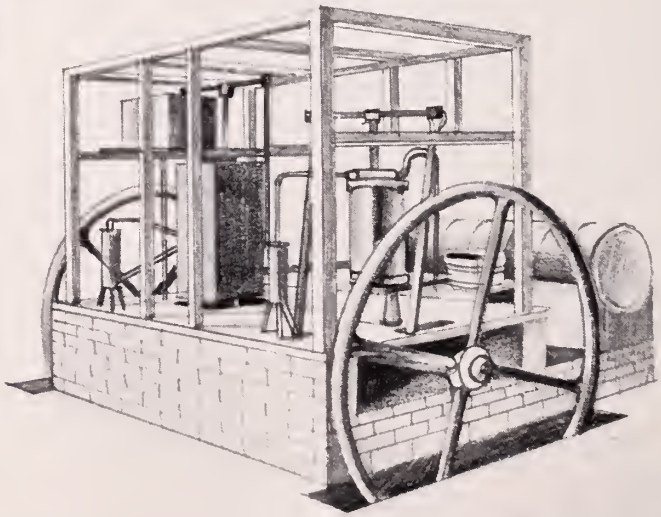
It was, therefore, a significant medical development when, on May 6, 1851, U.S. patent No. 8080 was granted to Dr. John Gorrie of Apalachicola for his mechanical refrigeration technique that perfected the process for making artificial ice.[2]

Dr. Gorrie installed his artificial ice machine in the United States Marine Hospital in Apalachicola;[2] there it came to the attention of other Florida physicians, who began to explore ways of using the ice-making process in preventing and treating yellow fever.[3]

Now a necessity

Today its medical applications are myriad—medications are kept fresh, foods are kept chilled, germs are kept under control, patients are kept comfortable and, often, treatments include applications of ice packs. All these conveniences and treatments—and more—are direct descendants from the historic invention of Dr. John Gorrie.

References: 1. Headquarters: The hospital, chap. 7, in Lee RV, Eimerl S *et al*: *The Physician*. New York, Life Science Library, Time Inc., 1967, p. 149 **2.** Kane JN: *Famous First Facts*, 3rd ed., New York, The H. W. Wilson Co., 1964, p. 518 **3.** Day SM: *J. Fla. Med. Assoc.* 69:719, 1982.



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When the history reveals anxious depression...

For the estimated 70 percent of nonpsychotic depressed patients who are also anxious,[1] Limbitrol provides both amitriptyline, specific for symptoms of depression, and the effects of Librium® (chlordiazepoxide HCl), the tested and dependable anxiolytic. Limbitrol is, therefore, a better choice for these patients than dual agents that contain a phenothiazine, a class of antipsychotic drugs used infrequently in nonpsychotic patients.[1]

62% of Overall Improvement...Within the First Week

Limbitrol also has a rapid onset of action which may lead to greater patient compliance. In a multicenter study, patients taking Limbitrol experienced 62% of their overall improvement within the first week of therapy.[2]

In another multicenter study,[3] the following symptoms associated with anxious depression were significantly reduced during the first two weeks of therapy:

- ☐ Headache—79%
- ☐ Early insomnia—91%
 Middle insomnia—87%
 Late insomnia—89%
- ☐ Gastrointestinal upset—73%

In two multicenter studies, only 1.9% of Limbitrol patients experienced cardiovascular side effects.[3]

Patients should be cautioned about the combined effects with alcohol or other CNS depressants and about activities requiring complete mental alertness such as operating machinery or driving a car.

References: 1. Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine,* edited by Jarvik ME; New York, Appleton-Century-Crofts, 1977, p. 316. **2.** Feighner JP *et al: Psychopharmacology 61*:217-229, Mar 1979. **3.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ

In moderate depression and anxiety

Limbitrol® 5/12.5 10/25

Tablets 5-12.5 each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)
Tablets 10-25 each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt)

Please see summary of product information on following page.

LIMBITROL® TABLETS Ⓝ Tranquilizer—Antidepressant
Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of moderate to severe depression associated with moderate to severe anxiety
Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.
Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).
***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage; withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).
Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.
Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.
The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:
Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.
Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.
Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.
Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilation of urinary tract.
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.
Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.
Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.
Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.
Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.
Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly.
Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.
How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500, Tel-E-Dose® packages of 100, Prescription Paks of 50.

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Meetings

Accepted by the FMA Committee on Continuing Medical Education for Mandatory Credit

MAY

Sleep Disorders, May 3, Holy Cross Hospital, Ft. Lauderdale. For info.: John R. Fichtelman, M.D., Holy Cross Hospital, P.O. Box 23460, Ft. Lauderdale, 33307 (305) 492-5728.

Dimensions of Critical Care, May 5-7, Burnt Store Marina Inn, Port Charlotte. For information: Rosemary Olex, 101 Olean Blvd., N.W., Port Charlotte, FL 33952, (813) 629-1181 Ext. 381.

L.W. Blake Memorial Continuing Medical Education Conference, May 6, 13, 20 & 27, L.W. Blake Memorial Meeting Room, Bradenton. For information: Jack H. Sanders, M.D., 2010 Medical Arts Bldg., #5100, Bradenton, FL 33529, (813) 792-8467.

1983 Clinical Conference on Pre-hospital Emergency Care, May 8-10, Hyatt Orlando. For information: 1983 CliniCon Registration, 600 Courtland Street, Suite 420, Orlando 32804, (305) 628-4800.

Aging Population, May 11, Peace River Country Club. For information: Fred Floyd, M.D., P.O. Box 927, Lakeland, (813) 682-0543.

International Symposium of Tissue Repair Biological and Clinical Aspects of Soft and Hard Tissue Repair, May 11-15, Innisbrook at Tarpon Springs, Tarpon Springs. For information: Symposia Medicus, 2880 Shadelands Drive, Suite 404, Walnut Creek, CA 94598.

Second Annual Geriatric Workshop, May 12-15, Ponte Vedra Beach. For information: Arthur W. Browning Jr., M.D., 9109 Baymeadows Road, Jacksonville, (904) 731-5550.

Ninth Annual Seminar Current Neonatal and Pediatric Respiratory Care, May 13-15, Sheraton-Sand Key Hotel, Clearwater Beach. For information: B.J. Mullholand, M.D., Gulf Coast Lung Association, 6160 Central Avenue, St. Petersburg 33707, (813) 347-6133.

What Every Doctor Needs to Know About, May 19, Cypress Community Hospital Auditorium, Pompano Beach. For information: Richard Shapiro, M.D., 3880 Coconut Creek Parkway, Coconut Creek, (305) 973-9666.

JUNE

Clinical Treatment for Poisonous Snake Bites/From Quality Assurance to Quality Control, June 2, Town and Country Hospital, Tampa. For information: Stephen Lewis, M.D., Chief of Staff, 6001 Webb Road, Tampa 33615, (813) 884-7971.

Medico Surgical Concepts in Chest Disease, June 12, Hyatt Regency Hotel, Tampa. For information: Americo Gonzalvo, M.D., 5415 West Laurel Blvd., Tampa 33607, (813) 879-3400.

Female Memopause: Moan or Hormone, June 13, Good Samaritan Hospital, West Palm Beach. For information: John C. Whelton, M.D., Good Samaritan Hospital, P.O. Box 3166, West Palm Beach 33042, (305) 655-5111 or (305) 684-2030.

34th Annual Scientific Assembly, June 15-19, Breakers Hotel, Palm Beach. For information: Lee A. Fischer, M.D., (305) 968-7600.

Endoscopic Laser Therapy, June 18 & 19, Palms of Pasedena Hospital, St. Petersburg. For information: Peter M. Pardoll, M.D., 1609 Pasadena Avenue South, St. Petersburg 33707, (813) 384-6606.

Arrhythmias and Cardiac Ischemia: Diagnosis and Management, June 24-26, Orlando Hyatt, Orlando. For information: Howard Bronson, M.D., International Medical Education Corporation, 64 Inverness Dr. East, Englewood, CO 80112, (303) 333-1577.

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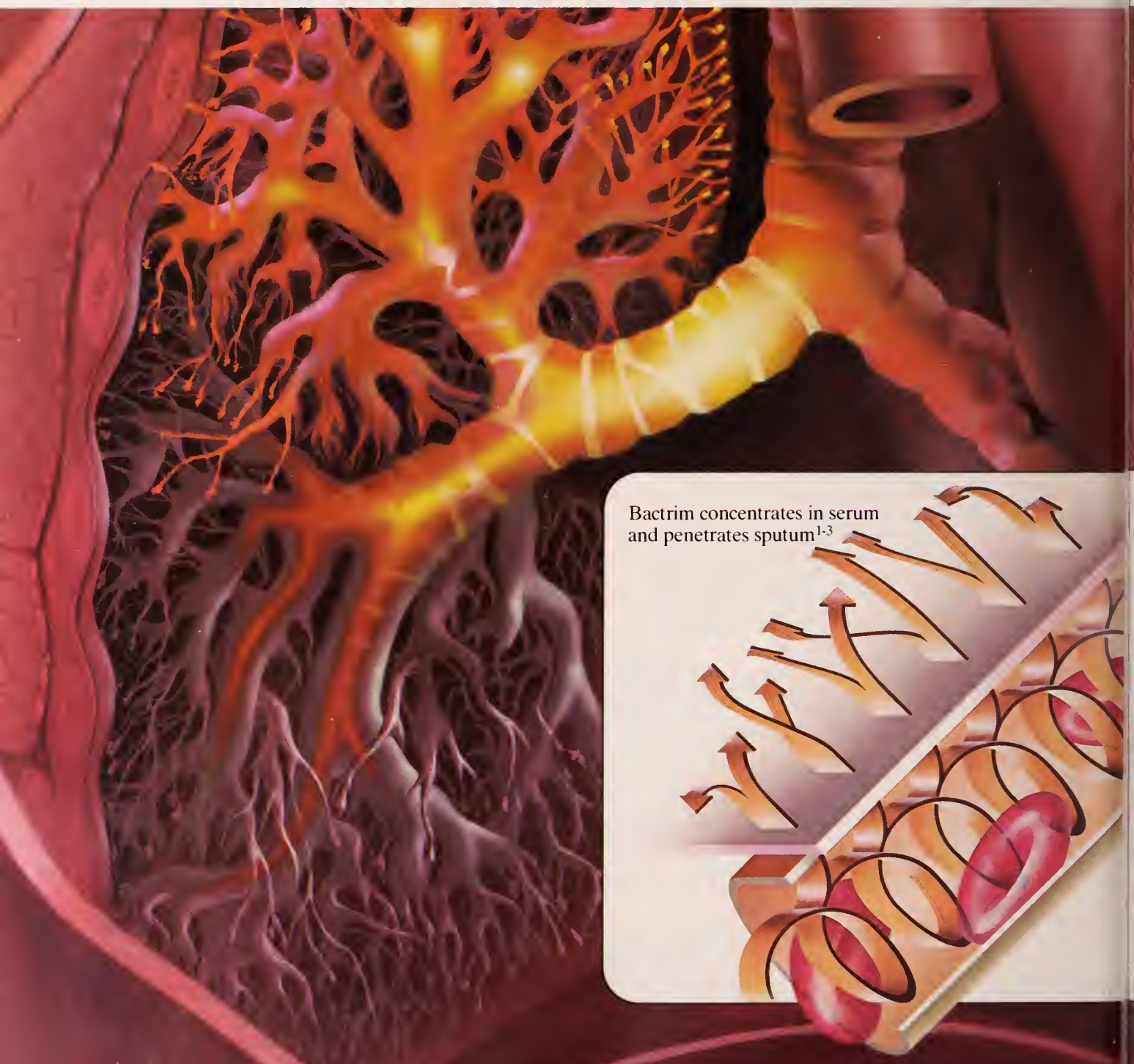
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J-9043-4 July 1981

Bactrim™ attacks the
(trimethoprim and sulfamethoxazole/Roche)
in acute exacerbations



Bactrim concentrates in serum and penetrates sputum[1-3]

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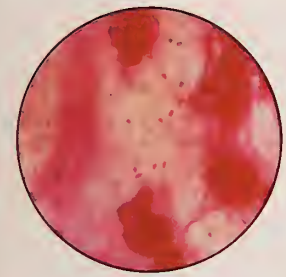
major pathogens of chronic bronchitis*

Bactrim clears sputum of susceptible bacteria

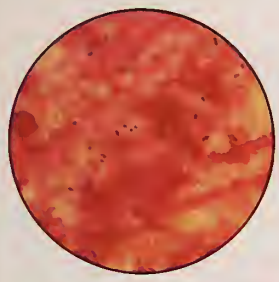
In sputum cultures from patients with acute exacerbations of chronic bronchitis, *H. influenzae* and *S. pneumoniae* are isolated more often than any other pathogens.[4,5] One study of transtracheal aspirates from 76 patients with acute exacerbations found that 80% of the isolates were of these two pathogens.[5]

Bactrim is effective *in vitro* against most strains of both *S. pneumoniae* and *H. influenzae*—even ampicillin-resistant strains. And in acute exacerbations of chronic bronchitis involving these two pathogens, sputum cultures taken seven days after a two-week course of therapy showed that Bactrim eradicated these bacteria in 91% (50 of 55) of the patients treated.[6]

attacks *H. influenzae*—even ampicillin-resistant strains



attacks *S. pneumoniae*



Bactrim reduces coughing and sputum production

In three double-blind comparisons with ampicillin *q.i.d.*, Bactrim DS proved equally effective on all clinical parameters.[7-9] Bactrim reduced the frequency and severity of coughing, reduced the amount of sputum produced and cleared the sputum of purulence.

Bactrim has the added advantages of *b.i.d.* dosage convenience and a lower incidence of diarrhea than with ampicillin, and it is useful in patients allergic to penicillins.

Bactrim also proved more effective than tetracyclines in 10 clinical trials involving nearly 700 patients.[10] Overall clinical condition of the patients, changes in sputum purulence, reduction in sputum volume and microbiological clearance of pathogens—all improved more with Bactrim therapy than with tetracyclines. G.I. side effects occurred in only 7% of patients treated with Bactrim compared with 12% of tetracycline-treated patients. (See Adverse Reactions in summary of product information on next page.)

Bactrim is contraindicated in pregnancy at term and nursing mothers, infants under two months of age, documented megaloblastic anemia due to folate deficiency and hypersensitivity.

Bactrim DS. For acute exacerbations of chronic bronchitis in adults* when it offers an advantage over single-agent antibacterials.

References: 1. Hughes DTD, Bye A, Hodder P: *Adv Antimicrob Antineoplastic Chemother 1/2*:1105-1106, 1971. **2.** Jordan GW *et al: Can Med Assoc J 112*:91S-95S, Jun 14, 1975. **3.** Beck H, Pechere JC: *Prog Antimicrob Anticancer Chemother 1*:663-667, 1969. **4.** Quintiliani R: Microbiological and therapeutic considerations in exacerbations of chronic bronchitis, in *Chronic Bronchitis and Its Acute Exacerbations: Current Diagnostic and Therapeutic Concepts;* Princeton Junction, NJ, Communications Media for Education, Inc., 1980, pp. 9-12. **5.** Schreiner A *et al: Infection 6*(2):54-56, 1978. **6.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **7.** Chodosh S: Treatment of acute exacerbations of chronic bronchitis: results of a double-blind crossover clinical trial, in *Chronic Bronchitis and Its Acute Exacerbations: Current Diagnostic and Therapeutic Concepts. Op. cit.*, pp. 15-16. **8.** Chervinsky P: Double-blind clinical comparisons between trimethoprim-sulfamethoxazole (Bactrim™) and ampicillin in the treatment of bronchitic exacerbations. *Ibid.*, pp. 17-18. **9.** Dulfano MJ: Trimethoprim-sulfamethoxazole vs. ampicillin in the treatment of exacerbations of chronic bronchitis. *Ibid.*, pp. 19-20. **10.** Medici TC: Trimethoprim-sulfamethoxazole (Bactrim™) in treating acute exacerbations of chronic bronchitis: summary of European clinical experience. *Ibid.*, pp. 13-14.

Economical b.i.d.

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole/Roche)

*Due to susceptible organisms. **Please see next page for summary of product information.**

Bactrim™

(trimethoprim and sulfamethoxazole/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency, pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100, Prescription Paks of 40. *Pediatric Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml), fruit-licorice flavored—bottles of 16 oz (1 pint).

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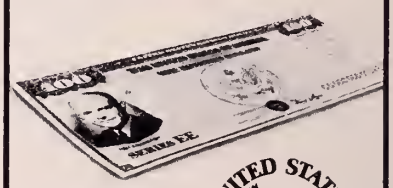
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Pain—triggering anxiety—which accentuates the perception of pain...together they're worse than either alone. And since they're usually both present in musculoskeletal disorders, the best therapy is often a combination of analgesic and anxiolytic agents. Equagesic®-M combines the pain relief of aspirin with the tension-reducing properties of meprobamate—because together they're better than either alone.

See important information on next page.

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(meprobamate with aspirin) © Wyeth

Effective analgesic/anxiolytic alliance





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(meprobamate with aspirin) © Wyeth

Effective analgesic/anxiolytic alliance

Proven superior to aspirin alone in controlled clinical trials

(BRIEF SUMMARY)

DESCRIPTION: Each tablet contains 200 mg meprobamate and 325 mg aspirin.

INDICATIONS: Adjunct in short-term treatment of pain accompanied by tension and/or anxiety in patients with musculoskeletal disease. Clinical trials demonstrated in these situations relief of pain is somewhat greater than with aspirin alone. Effectiveness in long-term use, i.e. over 4 months, has not been assessed by systematic studies. Physicians should periodically reassess usefulness of drug for individual patients.

CONTRAINDICATIONS: ASPIRIN: Allergic or idiosyncratic reactions to aspirin or related compounds. MEPROBAMATE: Acute intermittent porphyria, allergic or idiosyncratic reactions to meprobamate or related compounds, e.g. carisoprodol, mebutamate, or carbromal.

WARNINGS: ASPIRIN: Use salicylates with extreme caution in patients with peptic ulcer, asthma, coagulation abnormalities, hypoprothrombinemia, vitamin K deficiency, or those on anticoagulants. In rare instances, aspirin in persons allergic to salicylates may result in life-threatening allergic episodes. MEPROBAMATE: DRUG DEPENDENCE: Physical and psychological dependence, and abuse have occurred. Chronic intoxication from prolonged ingestion of, usually greater than recommended doses is manifested by ataxia, slurred speech, and vertigo. Therefore, carefully supervise dose and amounts prescribed and avoid prolonged use, especially in alcoholics and others with known propensity for taking excessive quantities of drugs. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of preexisting symptoms, e.g. anxiety, anorexia, or insomnia, or withdrawal reactions, e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinosis, and, rarely, convulsive seizures. Such seizures are more likely in persons with CNS damage or preexistent or latent convulsive disorders. Onset of withdrawal symptoms occurs usually within 12 to 48 hours after discontinuation, symptoms usually cease within next 12-to-48-hour period. When excessive dosage has continued for weeks or months, reduce dosage gradually over 1 to 2 weeks rather than stop abruptly. Alternatively, a short-acting barbiturate may be substituted, then gradually withdrawn.

POTENTIALLY HAZARDOUS TASKS: Warn patients meprobamate may impair mental or physical abilities required for potentially hazardous tasks, e.g., driving or operating machinery.

ADDITIVE EFFECTS: Since CNS-suppressant effects of meprobamate and alcohol or meprobamate and other psychotropic drugs may be additive, exercise caution with patients taking more than one of these agents simultaneously.

USAGE IN PREGNANCY AND LACTATION. An increased risk of congenital malformations associated with minor tranquilizers (meprobamate, chlordiazepoxide, and diazepam) during first trimester of pregnancy, has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, their use during this period should almost always be avoided. The possibility that a woman of childbearing potential may be pregnant at time of institution of therapy should be considered. Advise patients if they become pregnant during therapy or intend to became pregnant to communicate with their physicians about desirability of discontinuing the drug.

Meprobamate passes the placental barrier. It is present both in umbilical cord blood at or near maternal plasma levels and in breast milk of lactating mothers at concentrations two to four times that of maternal plasma. When use of meprobamate is contemplated in breastfeeding patients, consider the drug's higher concentrations in breast milk as compared to maternal plasma levels.

USAGE IN CHILDREN: Keep preparations with aspirin out of reach of children. Equagesic®-M is not recommended for patients 12 years of age and under.

PRECAUTIONS: ASPIRIN: Salicylates antagonize uricosuric activity of probenecid and sulfinpyrazone. Salicylates are reported to enhance hypoglycemic effect of sulfonylurea antidiabetics.

MEPROBAMATE: Use lowest effective dose, particularly in elderly and/or debilitated, to preclude over-sedation. Meprobamate is metabolized in the liver and excreted by the kidney, to avoid excess accumulation exercise caution in its use in patients with compromised liver or kidney function. Meprobamate occasionally may precipitate seizures in epileptic patients. It should be prescribed cautiously and in small quantities to patients with suicidal tendencies.

ADVERSE REACTIONS: ASPIRIN: May cause epigastric discomfort, nausea, and vomiting. Hypersensitivity reactions, including urticaria, angioneurotic edema, purpura, asthma, and anaphylaxis may rarely occur. Patients receiving large doses of salicylates may develop tinnitus.

MEPROBAMATE: CNS: Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impairment of visual accommodation, euphoria, overstimulation, paradoxical excitement, fast EEG activity.

GI: Nausea, vomiting, diarrhea.

CARDIOVASCULAR: Palpitation, tachycardia, various forms of arrhythmia, transient ECG changes, syncope, hypotensive crisis.

ALLERGIC OR IDIOSYNCRATIC: Milder reactions are characterized by itchy urticarial, or erythematous maculopapular rash, generalized or confined to the groin. Other reactions include leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy, fever, fixed drug eruption with cross-reaction to carisoprodol, and cross-sensitivity between meprobamate, mebutamate and meprobamate carbromal. Rare, more severe hypersensitivity reactions include hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, and anuria. Also, anaphylaxis, exfoliative dermatitis, stomatitis, and pruritis. Stevens-Johnson syndrome and bullous dermatitis have occurred.

HEMATOLOGIC (SEE ALSO "ALLERGIC OR IDIOSYNCRATIC"): Agranulocytosis, aplastic anemia have been reported, although no causal relationship has been established, and thrombocytopenic purpura.

OTHER: Exacerbation of porphyric symptoms.

DOSAGE AND ADMINISTRATION: Usual dose is one or two tablets, 3 to 4 times daily as needed for relief of pain when tension or anxiety is present. Not recommended for patients 12 years of age and under.

OVERDOSAGE: Treatment is essentially symptomatic and supportive. Any drug remaining in the stomach should be removed. Induction of vomiting or gastric lavage may be indicated. Activated charcoal may reduce absorption of both aspirin and meprobamate. Aspirin overdosage produces usual symptoms and signs of salicylate intoxication. Observation and treatment should include management of hyperthermia, specific parenteral electrolyte therapy for ketoacidosis and dehydration, watching for evidence of hemorrhagic manifestations due to hypoprothrombinemia which, if it occurs, usually requires whole-blood transfusions. Suicidal attempts with meprobamate have resulted in drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse. Some suicidal attempts have been fatal. The following data, reported in the literature and from other sources, are not expected to correlate with each case (considering factors such as individual susceptibility and length of time from ingestion to treatment), but represent usual ranges reported. Acute simple overdose (meprobamate alone): Death has been reported with ingestion of as little as 12 gram meprobamate and survival with as much as 40 gram.

BLOOD LEVELS:

0.5-2.0 mg percent represents usual blood-level range after therapeutic doses. The level may occasionally be as high as 3.0 mg percent.

3-10 mg percent usually corresponds to findings of mild-to-moderate symptoms of overdosage, such as stupor or light coma.

10-20 mg percent usually corresponds to deeper coma, requiring more intensive treatment. Some fatalities occur.

At levels greater than 20 mg percent, more fatalities than survivals can be expected.

Acute combined overdose (meprobamate with other psychotropic drugs or alcohol): Since effects can be additive, history of ingestion of a low dose of meprobamate plus any of these compounds (or of a relatively low blood or tissue level) cannot be used as a prognostic indicator.

In cases of excessive doses, sleep ensues rapidly and blood pressure, pulse, and respiratory rates are reduced to basal levels. Any drug remaining in stomach should be removed and symptomatic treatment given. Should respiration or blood pressure become compromised, respiratory assistance, CNS stimulants, and pressor agents should be administered cautiously as indicated. Diuresis, osmotic (mannitol) diuresis, peritoneal dialysis, and hemodialysis have been used successfully in removing both aspirin and meprobamate. Alkalinization of the urine increases excretion of salicylates. Careful monitoring of urinary output is necessary, and caution should be taken to avoid overhydration.

Relapse and death, after initial recovery, have been attributed to incomplete gastric emptying and delayed absorption.

HOW SUPPLIED: Bottles of 50 scored tablets.

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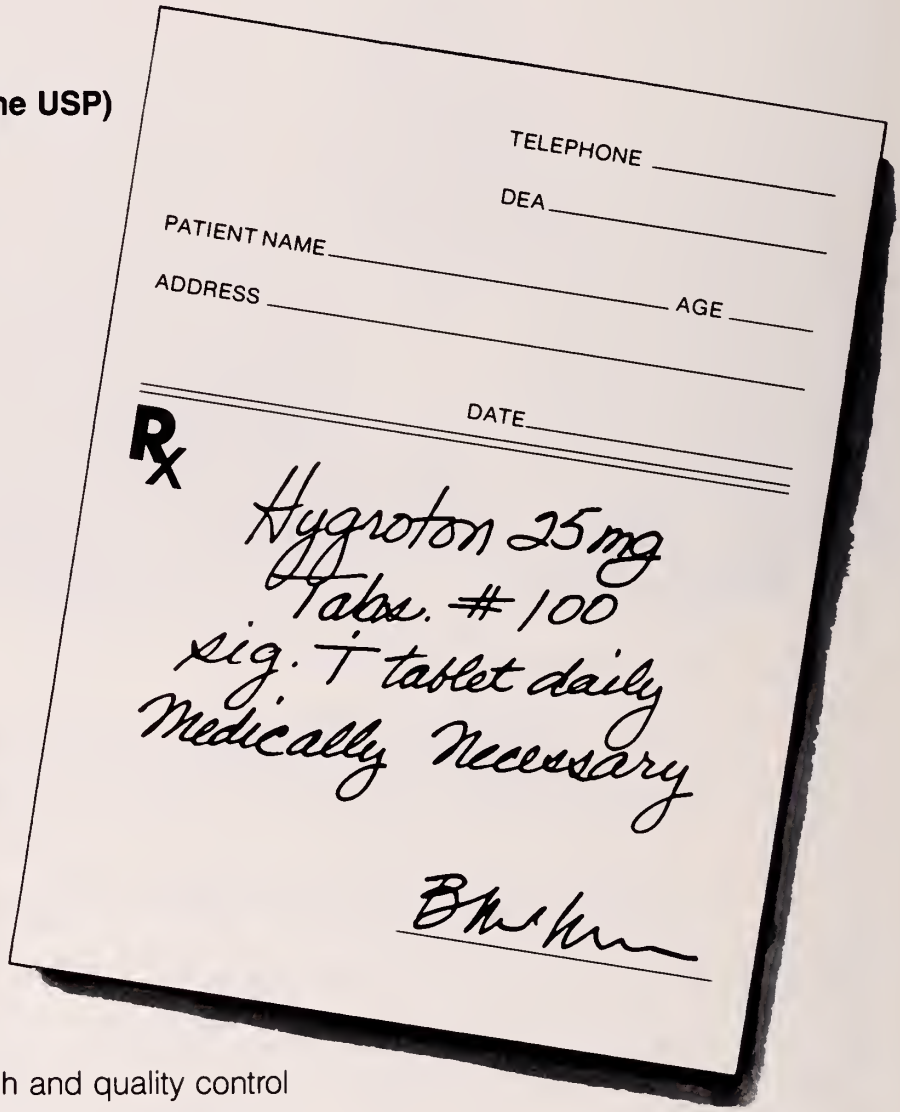
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BRIEF SUMMARY

Indications: Hypertension, adjunctive therapy in edema.

Contraindications: Anuria, hypersensitivity to chlorthalidone or other sulfonamide-derived drugs.

Warnings: Should be used with caution in severe renal disease, impaired hepatic function or progressive liver disease. May add to or potentiate the action of other antihypertensive drugs. Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma. There is a possibility of exacerbation or activation of systemic lupus erythematosus with thiazides, which are related to chlorthalidone. This has not been reported with chlorthalidone. Thiazides cross the placental barrier and appear in cord blood. Use in pregnant women requires that the anticipated benefits of the drug be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. In nursing mothers, thiazides cross the placental barrier and appear in breast milk. If use of the drug is essential, the patient should stop nursing.

Precautions: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals. All patients receiving chlorthalidone should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Hypokalemia may develop with chlorthalidone as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH. Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity. Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather. Hyperuricemia may occur or gout be precipitated in certain patients. Insulin requirements in diabetic patients may be increased, decreased, or unchanged and latent diabetes mellitus may become manifest. Chlorthalidone and related drugs may increase the responsiveness to tubocurarine. The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient. Chlorthalidone and related drugs may decrease arterial responsiveness to norepinephrine. If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy. Chlorthalidone and related drugs may decrease serum PBI levels without signs of thyroid disturbance.

Adverse Reactions: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis; dizziness, vertigo, paresthesias, headache, xanthopsia; leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia; purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis) (cutaneous vasculitis), Lyell's syndrome (toxic epidermal necrolysis). Orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates or narcotics. Other adverse reactions include hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness, impotence. Whenever adverse reactions are moderate or severe, chlorthalidone dosage should be reduced or therapy withdrawn.

Usual Dose: One tablet daily.

How Supplied: Tablets—100 mg. (white, scored), 50 mg. (aqua) in bottles of 100, 1000 and 5000; 25 mg. (peach) in bottles of 100 and 1000; unit-dose blister packs, boxes of 100 (10 x 10 strips).

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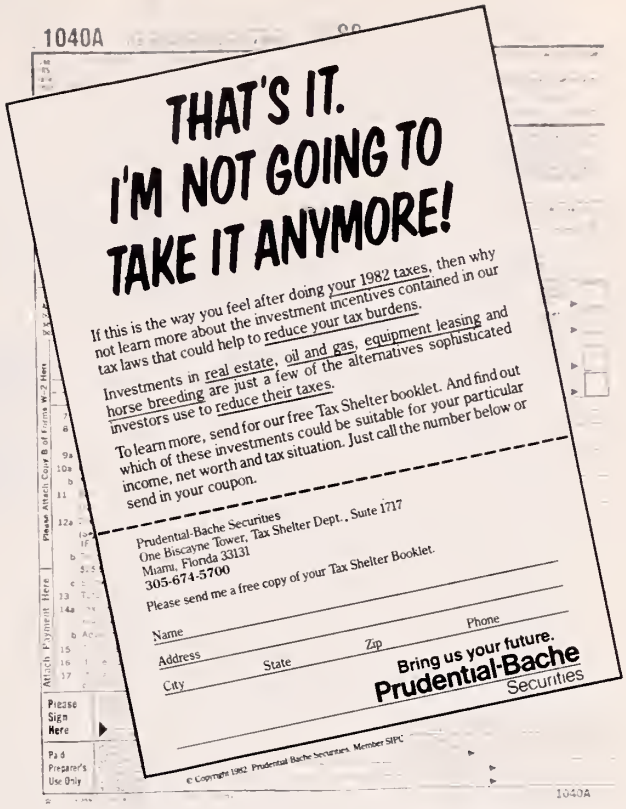
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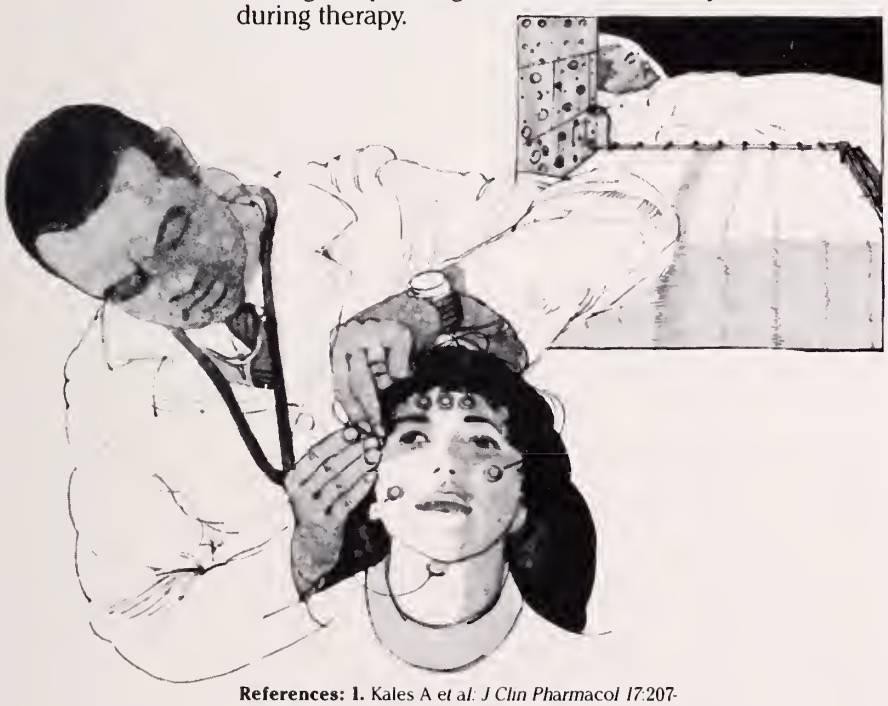
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References: 1. Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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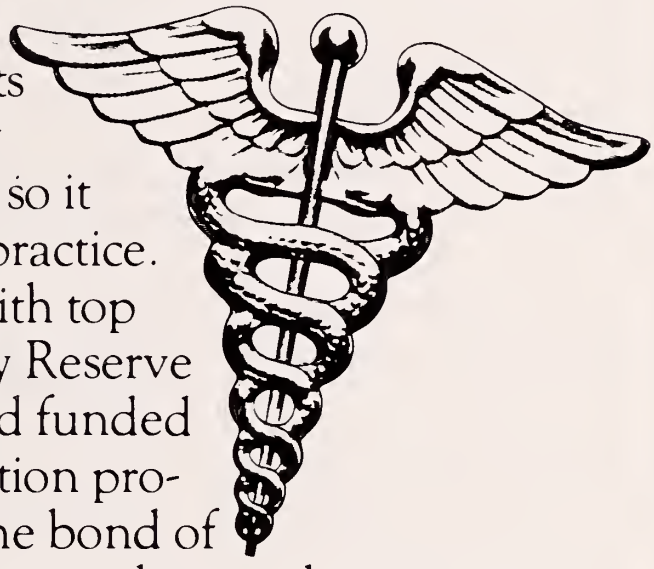
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This month's cover of *The Journal* was designed and drawn by Andre Renard, M.D., a Plastic Surgeon practicing in Jacksonville. The cover depicts the lead article "Hirsutism" by Eunice M. Lasche, M.D. of Tampa, which begins on page 347.

Dr. Renard shows enlarged ovaries with thick capsules and multiple cysts which are known as polystic ovarian disease (PCOD). Also illustrated is a etiological pathology of the hair follicle.

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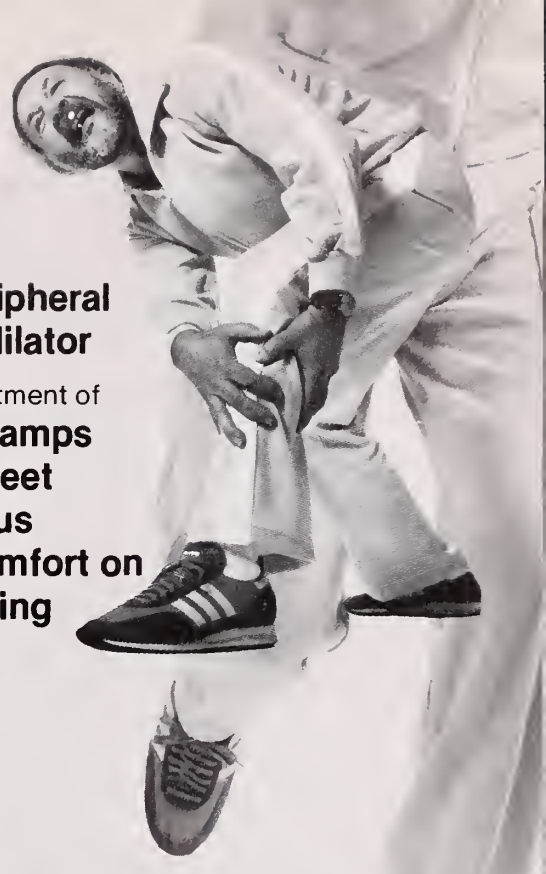
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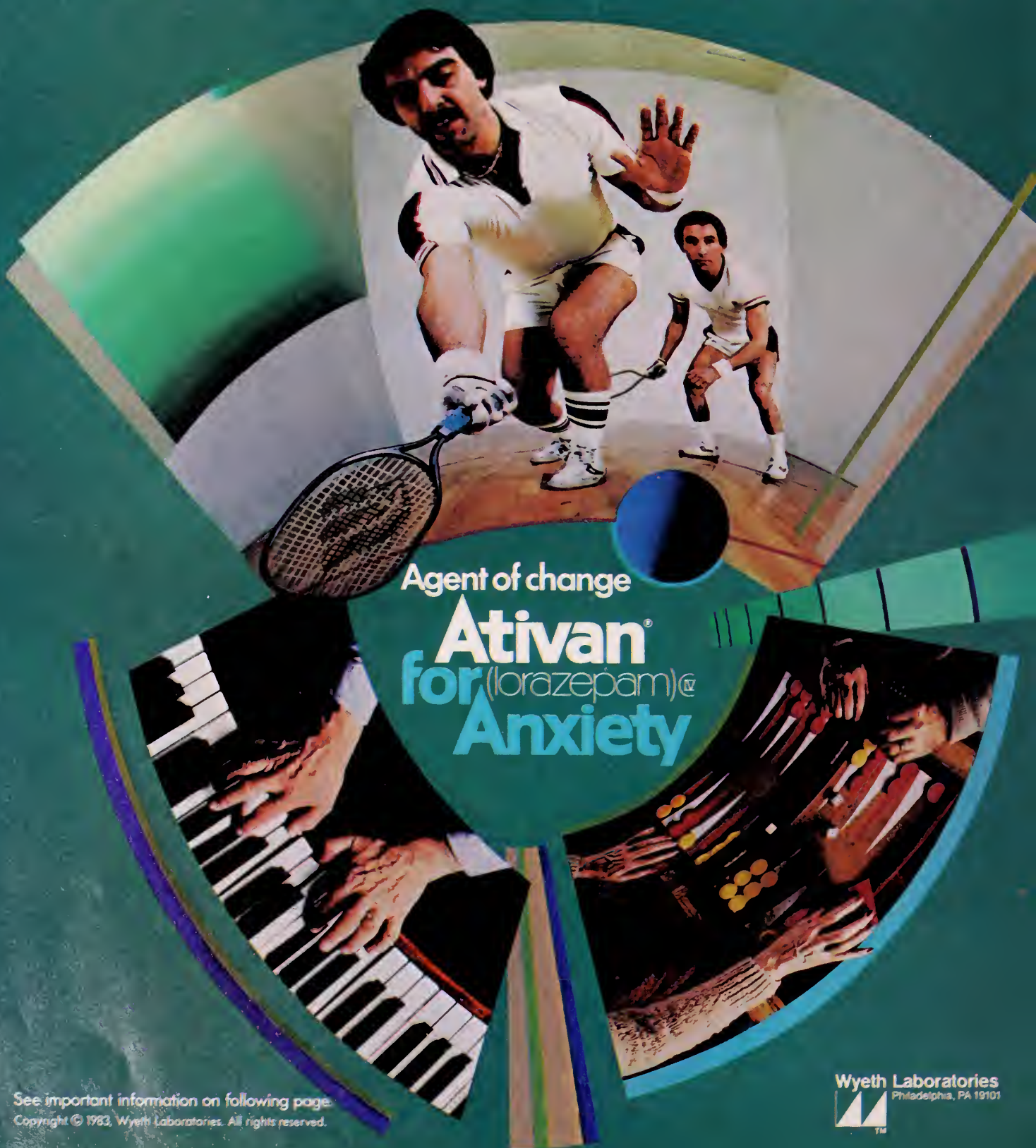
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Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Ativan® (IV) for (lorazepam) Anxiety

DOSAGE: Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.

HOW SUPPLIED: 0.5, 1.0 and 2.0mg tablets.

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FMA Committee on Impaired Physicians

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ONE FOR ALL – One tablet treats pinworm in any patient, regardless of age or body weight.* Obviates need to calculate individual dosages.

A single tablet eradicates pinworm in 95% of patients.

*Contraindicated in pregnant women and in persons who have shown hypersensitivity to the drug.

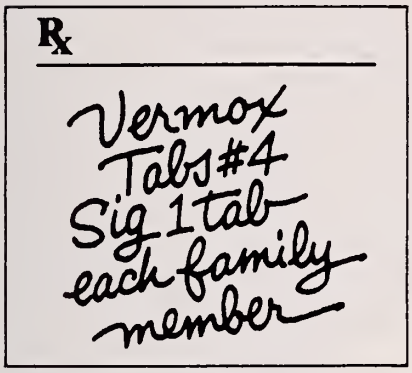
VERMOX® CHEWABLE TABLETS
(mebendazole)

JANSSEN PHARMACEUTICA

The #1 anthelmintic for pinworms and many other worm infestations

Please see complete Prescribing Information on adjacent page.

VERMOX® CHEWABLE TABLETS (mebendazole)





DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 μg/ml and 0.09 μg/ml, respectively.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5%-100%)	–	–

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium.

US Patent 3,657,267
December 1979

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because so much remains to be done.

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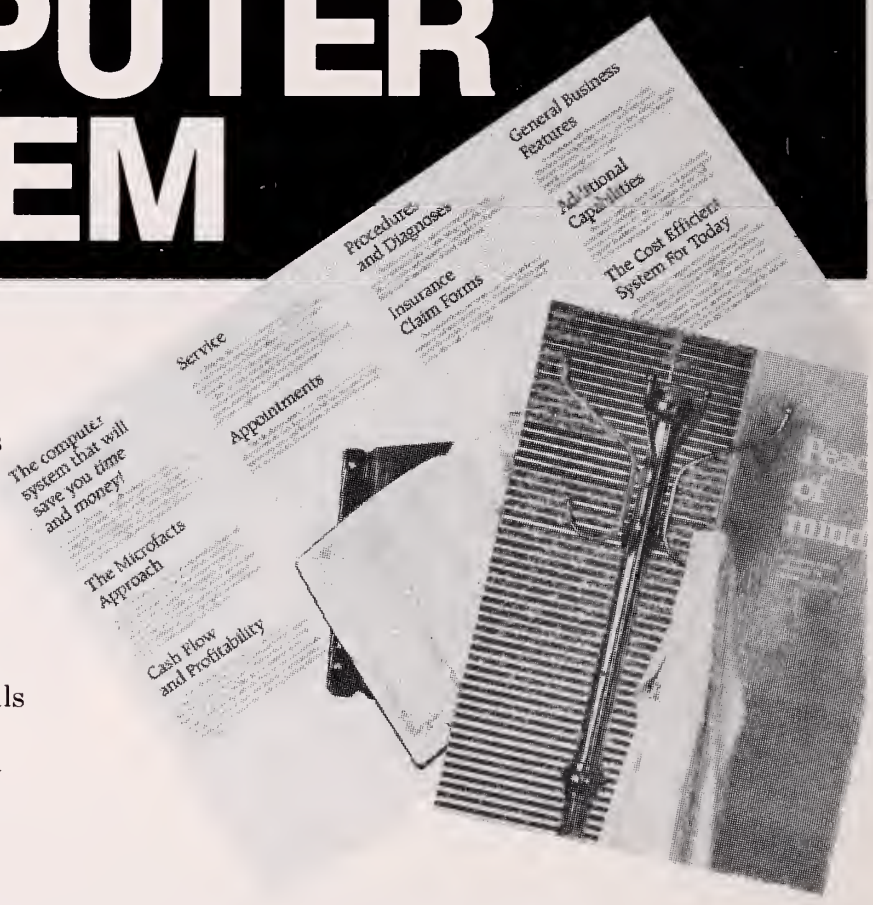
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PRESIDENT'S PAGE



When I assumed the office of President of the FMA just one year ago, I made reference to my interpretation of the condition of the House of Medicine. It was apparent then that the strength of our house was threatened by the weakness of our roof. I am happy to report to you now that the roof of the House of Florida Medicine has been strengthened greatly during this past year as a result of your individual efforts. We acquired new AMA members from our ranks of Florida physicians. The enthusiasm already demonstrated in acquiring this latest number of new members makes me optimistic that this trend will continue. As a result of these new members we have gained three more delegates to the AMA, bringing our number to eleven, which is a 35% increase in our delegate strength before the physicians of America.

As I depart from this honored position I want to leave some general comments about how I now perceive our profession. With the floor of our House of Medicine (county medical societies), our walls (state association) and with our roof (AMA) strengthened and durable, I am concerned about the role that is being followed by some of those individuals who live within our house. After visiting with many people throughout the state, and particularly listening to comments from editorial board members of 20 leading Florida newspapers, I believe that certain changes must be made in the personal conduct of some of our members. Frequently we hear that the physician is not devoting adequate time with the patient to explain or to discuss the individual's problem. Denying this very important part of the doctor-patient relationship results in any number of negative attitudes about the doctor. The worst result is a malpractice claim. Another area that is very dear to any patient is that of payment for medical services. Even though third party payors assist the great majority of our patients, many patients are perceptive of charges incurred and in some instances, have valid reasons to complain. When unrest occurs in this area the same consequence of a malpractice claim may occur simply because of a sensitivity about doctors making too much money. Therefore, I strongly believe that if each physician would devote more time to each patient's visit as well as reassess completely the true value of his service rendered in time and money, I am confident that we would have a significant lessening of opportunities for liability claims.

As far as our own FMA is concerned, I cannot say enough about the quality of our staff and the dedication of each one who plays a vital part in serving each one of us. Our professional leadership changes frequently but the stability and continuity of our staff leadership maintains a standard second to none. In fact, it has become quite apparent to me through my close association with the staff over the past several years that there are many of them who are more dedicated to the preservation of the high standards of the practice of medicine than some of our colleagues.

In looking toward the future it becomes apparent that Florida will be the recipient of a progressive increase in growth that will secondarily lead to progressive problems within the relationship between physicians and the general public. As our own professional membership increases as a result of this population gain there will be an ever-increasing need to maintain harmony within the ranks. I feel that at some future date it will be necessary to have as a full-time staff member of the FMA a physician whose background has been that of primary care in private practice. This type of individual will have the experience and be able to relate most closely with his peers in order to help bridge any gap that might exist between private practice and organized medicine whether it be on the county, state or national level. I foresee continued problems with membership participation as well as

membership involvement in the multiple needs of such an organizational structure. I am hopeful that there will be enough dedicated and committed individuals within the profession who will continue to maintain the steadfastness that has made us so strong to date.

I can only close my term of office by thanking all of you for your help in whatever manner it has been this year to assist in our completing another successful year within the organization. May all of you continue to show participation and particularly continue to seek out our colleagues who do not provide financial assistance for membership on the state and/or national level in order to get them to be part of the ranks of the organizational structure which made it possible for each one of us to become physicians in the first place. You can count on my continued support and optimistically I look forward to a bright future for our profession even in face of the adversities.

Robert E. Winston, M.D.

P.S. Always remember to include the AMA as part of your membership in the years to come. What you have done to this point has been very significant in enhancing the strength of Florida physicians on the national level.

Anxious patients improve in just a few days



And what is more reassuring to an excessively anxious patient than medication that promptly starts to relieve his discomforting symptoms? Valium® (diazepam/Roche) begins working within 30 to 90 minutes. Patients continue to improve in just a few days, and relief continues throughout the course of treatment.

There are other important benefits with Valium as well—along with its broad clinical range, Valium has an efficacy/safety profile that few, if any, drugs can match. This record has been achieved with extensive clinical experience, undoubtedly including yours. And, as you must have observed, side effects more serious than drowsiness, fatigue or ataxia rarely occur. Nevertheless, as with any CNS-acting agent, patients should be cautioned about driving, operating hazardous machinery or ingesting alcohol or other CNS-depressant drugs while taking Valium.

Yet another benefit Valium affords is flexibility. Available in 2-mg, 5-mg and 10-mg scored tablets, Valium enables you to titrate dosage to individual patient needs. For the geriatric patient, a starting dosage of 2 to 2½ mg once or twice a day is recommended. And, for patients who forget or skip medication, you can prescribe Valrelease™ (diazepam/Roche) 15-mg slow-release capsules, knowing that Valrelease will assure all the benefits of Valium 5 mg *t.i.d.* with the convenience of once-a-day dosage.

Discontinuation of Valium (or Valrelease) is typically as smooth as its start in short-term therapy. However, Valium and Valrelease should be discontinued gradually after more extended treatment. As you diminish dosage, the built-in tapering action of Valium and Valrelease will help avoid rapidly recurring anxiety symptoms and symptoms of withdrawal, and will help ease the patient's transition to independent coping when therapeutic goals have been achieved.

...that's one of the unique benefits of

Valium®

diazepam/Roche

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For a summary of product information, please turn the page.

ROCHE®

Valium® (diazepam/Roche) Ⓝ Tablets
Valrelease™ (diazepam/Roche) Ⓝ slow-release Capsules
Injectable Valium® (diazepam/Roche) Ⓝ

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, impending or acute delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in: relief of skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome. *Oral forms* may be used adjunctively in convulsive disorders, but not as sole therapy. *Injectable form* may also be used adjunctively in: status epilepticus; severe recurrent seizures; tetanus; anxiety, tension or acute stress reactions prior to endoscopic/surgical procedures; cardioversion.

The effectiveness of diazepam in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindications: Tablets or capsules in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

> *Usage in Pregnancy:* **Use of minor tranquilizers during first trimester should almost always be avoided because their use is rarely a matter of urgency and because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

ORAL. Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral forms adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

INJECTABLE. *To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling and, rarely, vascular impairment when used I.V. inject slowly, taking at least one minute for each 5 mg (1 ml) given; do not use small veins, i.e., dorsum of hand or wrist; use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Injectable Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.*

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest; concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea; have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence; can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of diazepam, *i.e.*, phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed and tolerated).

The clearance of diazepam and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

INJECTABLE. Although promptly controlled, seizures may return; readminister if necessary; not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures; use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated.

Adverse Reactions: Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, observed in patients during and after diazepam therapy are of no known significance.

INJECTABLE. Venous thrombosis/phlebitis at injection site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia. In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

Dosage: Individualize for maximum beneficial effect.

ORAL. *Adults:* Anxiety disorders, relief of symptoms of anxiety—Valium (diazepam/Roche) tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 Valrelease capsules (15 to 30 mg) daily. Acute alcohol withdrawal—tablets, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; or 2 capsules (30 mg) the first 24 hours, then 1 capsule (15 mg) daily as needed. Adjunctively in skeletal muscle spasm—tablets, 2 to 10 mg t.i.d. or q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily. Adjunctively in convulsive disorders—tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily.

Geriatric or debilitated patients: Tablets—2 to 2½ mg 1 or 2 times daily initially, increasing as needed and tolerated (see Precautions). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose.

Children: Tablets—1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use in children under 6 months). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose (not for use in children under 6 months).

INJECTABLE. Usual initial dose in older children and adults is 2 to 20 mg I.M. or I.V., depending on indication and severity. Larger doses may be required in some conditions (tetanus). In acute conditions injection may be repeated within 1 hour, although interval of 3 to 4 hours is usually satisfactory. Lower doses (usually 2 to 5 mg) with slow dosage increase for elderly or debilitated patients and when sedative drugs are added. (See Warnings and Adverse Reactions.)

For dosages in infants and children see below; have resuscitative facilities available.

I.M. use: by deep injection into the muscle.

I.V. use: inject slowly, take at least one minute for each 5 mg (1 ml) given. Do not use small veins, i.e., dorsum of hand or wrist. Use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.

Moderate anxiety disorders and symptoms of anxiety, 2 to 5 mg I.M. or I.V., and severe anxiety disorders and symptoms of anxiety, 5 to 10 mg I.M. or I.V., repeat in 3 to 4 hours if necessary; acute alcohol withdrawal, 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary. Muscle spasm, in adults, 5 to 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary (tetanus may require larger doses); in children *administer I.V. slowly*; for tetanus in infants over 30 days of age, 1 to 2 mg I.M. or I.V., repeat every 3 to 4 hours if necessary; in children 5 years or older, 5 to 10 mg repeated every 3 to 4 hours as needed. Respiratory assistance should be available.

Status epilepticus, severe recurrent convulsive seizures (I.V. route preferred), 5 to 10 mg adult dose administered slowly, repeat at 10- to 15-minute intervals up to 30 mg maximum. Repeat in 2 to 4 hours if necessary, keeping in mind possibility of residual active metabolites. Use caution in presence of chronic lung disease or unstable cardiovascular status. Infants (over 30 days) and children (under 5 years), 0.2 to 0.5 mg slowly every 2 to 5 min., up to 5 mg (I.V. preferred). Children 5 years plus, 1 mg every 2 to 5 min., up to 10 mg (slow I.V. preferred), repeat in 2 to 4 hours if needed. EEG monitoring may be helpful.

In endoscopic procedures, titrate I.V. dosage to desired sedative response, generally 10 mg or less but up to 20 mg (if narcotics are omitted) immediately prior to procedure; if I.V. cannot be used, 5 to 10 mg I.M. approximately 30 minutes prior to procedure. As preoperative medication, 10 mg I.M.; in cardioversion, 5 to 15 mg I.V. within 5 to 10 minutes prior to procedure. Once acute symptomatology has been properly controlled with injectable form, patient may be placed on oral form if further treatment is required.

Management of Overdosage: Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure; employ general supportive measures, I.V. fluids, adequate airway. Use levarterenol or metaraminol for hypotension. Dialysis is of limited value.

How Supplied:

ORAL. Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100 and 500; Prescription Paks of 50, available in trays of 10; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25 and in boxes containing 10 strips of 10.

Valrelease (diazepam/Roche) slow-release capsules—15 mg (yellow and blue), bottles of 100; Prescription Paks of 30.

INJECTABLE. Ampuls, 2 ml, boxes of 10; Vials, 10 ml, boxes of 1; Tel-E-Ject® (disposable syringes), 2 ml, boxes of 10. Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buffers, and 1.5% benzyl alcohol as preservative.

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Heart Answers



WHAT IS A HEART ATTACK?

A heart attack is the death of a portion of heart muscle that may result in disability or death, depending on how much of the heart is damaged. It occurs when an obstruction in one of the coronary arteries prevents the blood from supplying oxygen to the heart muscle. Heart attack symptoms may include chest pain, nausea and shortness of breath. The risk of heart attack can be reduced by treating high blood pressure, avoiding cigarette smoking, observing a low cholesterol diet and maintaining normal body weight.

American Heart Association

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*Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME; Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237.

Please see summary of product information on reverse page.

ROCHE®

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Rx ONLY **Berocca® Plus** TABLETS

THE MULTIVITAMIN/MINERAL FORMULATION



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Each Berocca® Plus tablet contains 5000 IU vitamin A (as vitamin A acetate), 30 IU vitamin E (as *dl*-alpha tocopheryl acetate), 500 mg vitamin C (ascorbic acid), 20 mg vitamin B_1 (as thiamine mononitrate), 20 mg vitamin B_2 (riboflavin), 100 mg niacin (as niacinamide), 25 mg vitamin B_6 (as pyridoxine HCl), 0.15 mg biotin, 25 mg pantothenic acid (as calcium pantothenate), 0.8 mg folic acid, 50 mcg vitamin B_{12} (cyanocobalamin), 27 mg iron (as ferrous fumarate), 0.1 mg chromium (as chromium nitrate), 50 mg magnesium (as magnesium oxide), 5 mg manganese (as manganese dioxide), 3 mg copper (as cupric oxide), 22.5 mg zinc (as zinc oxide).
INDICATIONS: Prophylactic or therapeutic nutritional supplementation in physiologically stressful conditions, including conditions causing depletion, or reduced absorption or bioavailability of essential vitamins and minerals; certain conditions resulting from severe B-vitamin or ascorbic acid deficiency; or conditions resulting in increased needs for essential vitamins and minerals.
CONTRAINDICATIONS: Hypersensitivity to any component.
WARNINGS: Not for pernicious anemia or other megaloblastic anemias where vitamin B_{12} is deficient. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with vitamin B_{12} deficiency who receive supplemental folic acid and who are inadequately treated with B_{12}.
PRECAUTIONS: *General:* Certain conditions may require additional nutritional supplementation. During pregnancy, supplementation with vitamin D and calcium may be required. Not intended for treatment of severe specific deficiencies. *Information for the Patient:* Toxic reactions have been reported with injudicious use of certain vitamins and minerals. Urge patients to follow specific dosage instructions. Keep out of reach of children. *Drug and Treatment Interactions:* As little as 5 mg pyridoxine daily can decrease the efficacy of levodopa in the treatment of parkinsonism. Not recommended for patients undergoing such therapy.
ADVERSE REACTIONS: Adverse reactions have been reported with specific vitamins and minerals, but generally at levels substantially higher than those in Berocca Plus. However, allergic and idiosyncratic reactions are possible at lower levels. Iron, even at the usual recommended levels, has been associated with gastrointestinal intolerance in some patients.
DOSAGE AND ADMINISTRATION: Usual adult dosage: one tablet daily. Not recommended for children. Available on prescription only.
HOW SUPPLIED: Golden yellow, capsule-shaped tablets — bottles of 100.

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Again Medicare changes the rules

The day of the DRGs is upon us. Over the past several months, Congress has been developing a complete restructuring of the Medicare payment system to hospitals under a directive from the Reagan administration to come up with a prospective payment program to halt spiralling costs. In the interim, hospitals have been operating under regulations promulgated in October, 1982, which were clearly intolerable and probably designed to enlist hospital cooperation in the development of the new system. If so, the strategy was apparently successful, since the program now scheduled to become effective October 1, 1983, is almost identical to the plan supported by the American Hospital Association since early this year. Until the very last minute, this plan was resisted by the AMA as being one with potential merit but little if any proven effectiveness. The AMA struggled to no avail to get Congress to first attempt this approach on a limited trial basis.

As a part of a comprehensive program to rescue the financially ailing Social Security system, hospital reimbursement under Medicare will gradually be changed to a system of payment by Diagnosis Related Groups (DRGs) based on the average national cost of care for each of 467 different diagnoses. The phase-in of this program will be over a four year term. In fiscal 1984, a hospital will be reimbursed for 75% of its Medicare computed "costs" and 25% of a regionally determined DRG rate. In 1985, the hospital will get 50% of costs, 37.5% of the regional DRG, and 12.5% of a nationally determined DRG. In 1986, the ratio will be 25% costs, 37.5% regional DRG, and 37.5% national DRG. In 1987, all payments will be based 100% on the national DRG rate. There will be two separate levels of DRG payment based on whether a hospital is considered rural or urban. There are also supposed to be adjustments made for the amount of indigent care provided by a hospital and the expenses involved in house-staff teaching programs. Initially, a hospital will continue to pass through capital improvement expenses as a reimbursable cost to the Medicare program, though this pass through will be phased out. Return on equity for the nation's private for-profit hospitals will be significantly reduced.

The major danger of this legislation appears to be it's effect on the relationship between hospital administrations and their medical staffs (and subsequently the relationship between physicians and their patients). The main determinants of hospital cost are the intensity of diagnostic and therapeutic services rendered and the length of hospital stay. These determinants are obviously controlled by physicians. The hospital's financial viability will therefore be determined by their ability to either enlist or enforce the cooperation of their medical staffs. If antagonism results, the physicians may find themselves without a financially sound hospital in which to practice — and subsequently without a hospital at all. It is therefore to the advantage of both that there be a strong attempt at cooperation. In order to ensure such cooperation, Congress has added the provision that reimbursement of physician fees for hosptialized patients by DRG's should be considered by December, 1984.

This system will certainly impact on the relationship of physicians with their patients. We will no longer be able to enjoy the luxury of ordering all the tests that might conceivably be of help. There will be pressure to do only what is necessary. We will no longer be able to keep the patient an extra day or two because of a special problem at home if his own need for hospitalization has been resolved. It is true that intensity of care and length of stay have both been abused in the past when all costs were reimbursed and there was no incentive to avoid their abuse. It is also true however that decisions as to what is appropriate intensity of care can be extremely difficult, and length of stay can sometimes be legitimately argued on the basis of important personal concerns not directly related to the patient's diagnosis. It is certainly appropriate for a physician to risk doing a little too much for his patients in an attempt to avoid the risk of doing too little. The assessment of these risks will sometimes be a heavy burdon as we struggle to render care to our patients while attempting to avoid causing our hospitals to be unduly penalized.

With the plan for the extension of the DRG system to include physicians' fees starting in 1985, Congress has added further reason for hospital staff members to

cooperate in trying to make this program work in some sort of reasonable form. The intent of both Congress and the administration is, of course, to reduce costs. If the program serves to adequately pay for good medical care while penalizing excessive and abusive care, then it would certainly be a major improvement in the health care system of this country. To the extent that the program cuts costs by failing to provide for good medical care, it will have damaged the system. Active medical staff participation in the monitoring of care within our hospitals and establishments of criteria for what constitutes good care appears to be our most potential weapons in an attempt to guarantee that cuts in reimbursement come from the areas of excess.

Once again, the future of our profession has been substantially effected by actions of our government. If this program works, the government will get the credit. If it does not work, we will get the blame. We had better try to make it work.

Henry L. Harrell Jr., M.D.
Ocala

Physician Apathy

In contemplating the recently completed 109th Annual Meeting of the FMA, I concluded that apathy is our worst enemy. It also became apparent to me that apathy can be manifested in several ways such as, disinterest, lack of information, failure to observe, self-delusion and denial. Apathy can be found, perhaps to the greatest extent, among doctors who are the most technically proficient, sincere, and dedicated to good patient care.

I saw disinterest manifested in the small attendance at the meeting. I saw lack of information regarding forces that are reshaping the practice of medicine. I saw failure to observe unattractive behavior in our ranks that is seen by the public and I saw denial of that behavior when pointed out by those who are so clearly observing it.

The result of this apathy is apparent in our legislature. Every year obnoxious bills pop up in an ostensible effort to correct some defect that is perceived to exist in the Body Medic. This year, there is the user's fee to be imposed on doctors to encourage them to restrict hospitalizations and expensive testing. There is also a bill to prohibit assignment of benefits to those doctors whose fees exceed the 80th percentile of their peers. Finally, enabling legislation has been introduced to permit carriers or employers to negotiate fees with a doctor or groups of doctors. The problems these bills are expected to correct are unnecessary hospitalizations and testing, and greedy doctors and fee gouging. In recent years, we have seen 2nd surgical opinion programs pushed because of the belief that unnecessary surgery is widespread. Mandated use of Problem Oriented Medical Record systems was considered in an effort to improve sloppy and inappropriate medical care. Requiring hospitals and doctors to publish their "batting averages" or "track records" presumably would have exposed the incompetent or impaired practitioners. All of these proposals are mischievous and probably would do more harm than good, but they indicate that problems are seen to exist. They require a great deal of effort to fight and that is a negative expenditure of energy which is self-defeating.

There are forces for change at work on our profession and they are inexorable. Medical practice of the 80's can not even resemble the medical practice of the 60's. Allied health professionals will be integrated into the "Team". Sophisticated technology will continue to grow and mature. Hospitals will expand their base, their role, and their orientation. There will be HMO's, PPO's, and Business-Industry-Labor-Medicine coalitions. Medicine can be an important element in the forces for change or it can passively be swept along by the forces. Our leadership is not apathetic. It is pleading for support. Our leaders are informed, interested, observant, and certainly have no delusions as the the realities of life. We must get our heads out of the sand and overcome our apathy. Then we must transcend the parochial interests of specialty and help the organization that can best affect social and economic changes, correct those deficits that do exist, and preserve those eternal values without which Medicine can't survive.

James K. Conn, M.D.
Tallahassee



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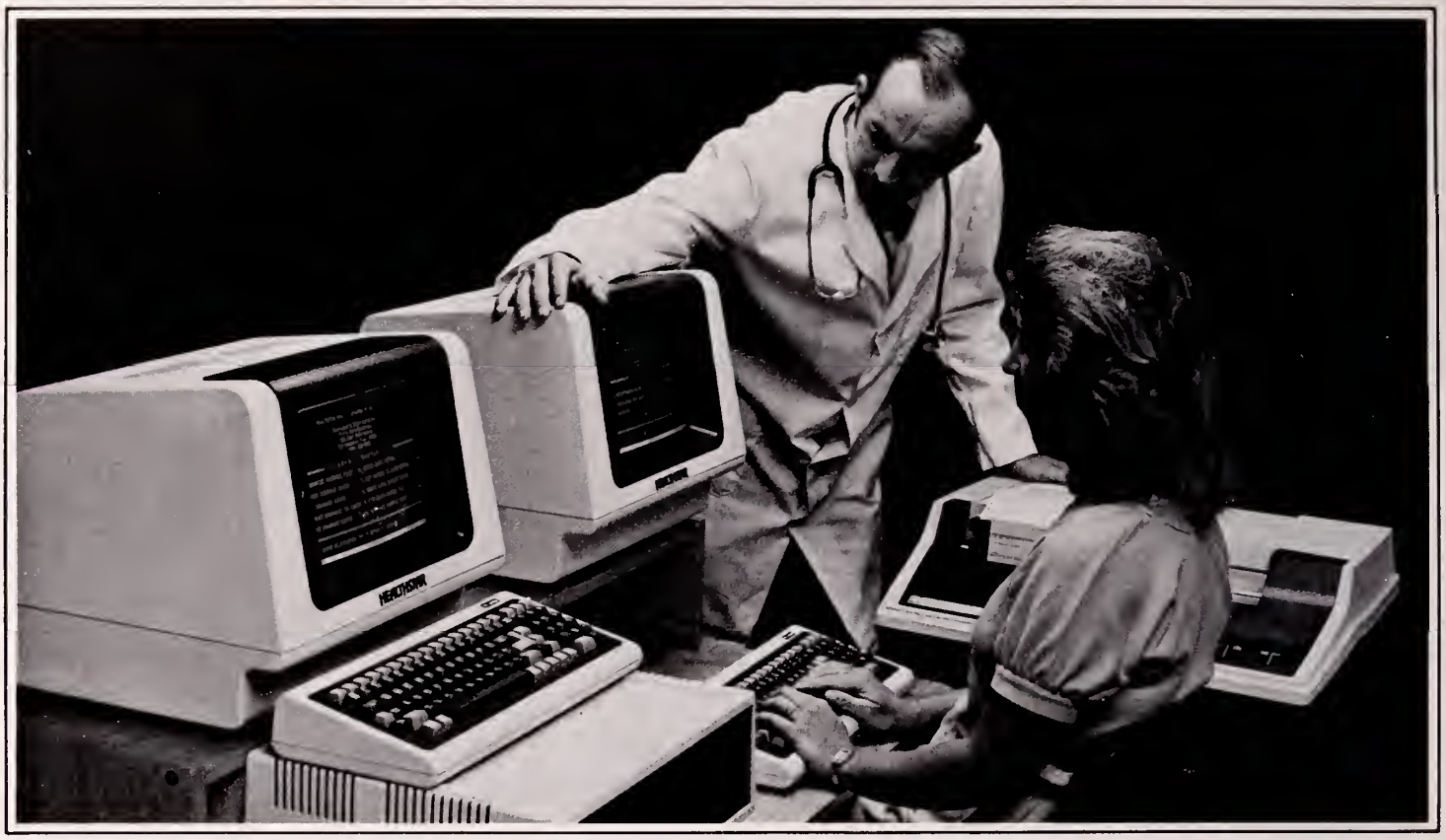
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Hirsutism

Eunice M. Lasche, M.D.

ABSTRACT: Hirsutism may be a manifestation of the polycystic ovarian syndrome, a spectrum of disorders with varied etiology generally associated with infertility. The most common are classic polycystic ovarian disease (PCOD) and ovarian stromal hyperthecosis; their pathogenesis is uncertain. Similar syndromes may occur with hyperprolactinemia, attenuated congenital adrenal hyperplasia (CAH) and ovarian and adrenal hypersecreting tumors. Borderline high testosterone and androstenedione levels may be associated with hyperthecosis but more commonly suggest PCOD, especially if enlarged ovaries are present, while significant elevation of either or both hormones may indicate hyperthecosis or tumor. Response of plasma 17-hydroxy progesterone to ACTH should be determined for diagnosis of attenuated CAH and serum prolactin for possible associated hyperprolactinemia. Results of treatment of hyperandrogenic syndromes to produce ovulation varies among patients except those with CAH and operable tumors. Oral contraceptives will produce regular menses, but response of hirsutism is much less satisfactory. New methods of treatment are discussed.

The Author
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Women patients frequently complain of abnormal hair growth to the internist and family practitioner as well as to the gynecologist. This condition may not only upset the patient cosmetically and be viewed as a threat to her femininity, but may be associated with infertility and possibly indicate a serious disorder. This paper presents a brief resume of disorders associated with this complaint, means of making a diagnosis, and management.

In evaluation one must keep in mind racial and ethnic differences. There is some relativity in what is considered hirsutism, the Caucasian race, and especially individuals of Mediterranean extraction, tending to have more body hair. There are also some women who may feel excessive concern over a few hairs on chin or upper lip so minimal in amount as to require only reassurance. Outside the scope of this discussion but to be kept in mind is hirsutism due to various drugs, and to the comparatively rare disorder of Cushing's syndrome which may be associated with some evidence of androgen excess, usually mild unless it is due to adrenal cortical carcinoma. If other stigmata and metabolic abnormalities of Cushing's appear present, tests starting with dexamethasone suppression and urinary free cortisol need to be done at the onset of hirsutism evaluation.

The subject of this discussion is the woman whose main presentation is hirsutism, defined as increased sexual hair of a type associated with male androgen levels on face, chest, abdomen, and thigh. Hair on the forehead, arms and lower legs, referred to as hypertricosis, which is of a finer texture, is not associated with androgens. With more marked androgen excess hirsutism may be accompanied by virilization consisting of enlarged clitoris, voice

change and sometimes temporal recession of the hair in a male baldness pattern. A heavy growth of hair along the sides of the face, resembling the male beard, is more often associated with virilization than simple hirsutism. Important information to be elicited at initial presentation of the hirsute patient consists of the presence or absence of amenorrhea, irregular menstrual periods, infertility and virilization. If any of these conditions are present, endocrinologic study is indicated and if absent, when hirsutism is of significant degree, such study is desirable to search for a treatable condition that might manifest future abnormality.

Sex steroid metabolism ● A brief review of sex steroid metabolism is given here in order to clarify the following discussion and laboratory tests. As can be seen in Table 1, steroidogenesis from cholesterol has arrived at pregnenolone and progesterone and proceeds down the two androgenic pathways, the Δ^4 and the Δ^5. It is important to remember that in the adrenal cortex the steroid sequence tends to stop predominantly at dehydroepi—androsterone (DHEA) and androstenedione (A) and a lesser amount of testosterone (T) and estradiol (E_2) are formed in comparison with the formation and secretion of T and E_2 by the ovary. Table 2 illustrates the significance of laboratory values of sex steroid metabolites. It is clear from this figure that elevated plasma T suggests an ovarian origin, and that significant increase in urinary 17-ketosteroids (17 KS) will not occur, as is to be expected when high levels of DHEA and A are present. Elevated estrone (E_1) levels occur especially through peripheral metabolism from A, as may also T. As can be seen in Tables 1 and 2 a block in cortisol formation leads to elevation of its precursor, 17-hydroxyprogesterone (17 OHP), in the serum and the latter's metabolite, pregnanetriol, in the urine as well as increased A via the androgen pathway.

Table 1.—Common metabolic pathways of sex steroids following formation of Δ^5 pregnenolone from cholesterol. P (progesterone), 170HP (17 hydroxyprogesterone, DHEA (dehydroepiandrosterone), A (androsterone), T (testosterone), E_1 (estrone), E_2 (estradiol).

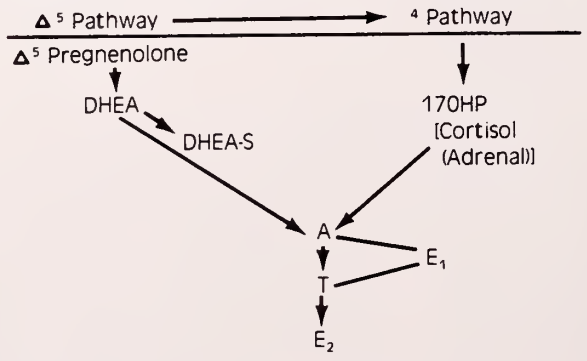


Table 2.—Main Metabolites of Major Sex Steroids in Plasma and Urine in the Female. 170HP (17 hydroxyprogesterone) A (androstenedione), DHEA (dehydroepiandrosterone) 17 KS (17 ketosteroids) T (testosterone) E_1 (estrone) E_2 (estradiol), *small amount

Steroid	Urinary Metabolite	Plasma Metabolite & Sites of Formation		
		Ovary	Adrenal	Peripheral
17 OHP	Pregnanetriol	A	A(+glucocorticoids)	
DHEA	17KS	A	A	DHEA-S
A	17KS	T	T*	E_1,T
T	Multiple Metabolites	E_2	E_2*	E_1

The site of sex steroid formation in the ovary bears a relationship to disorders of ovarian hormone secretion. As the granulosa cells increase in the developing follicle, the surrounding ovarian stroma becomes arranged concentrically into a theca interna, adjacent to the follicles, and a theca externa which merges with the ovarian stroma. The theca and the stroma secrete progesterone (P), 17 OHP and the androgens DHEA, A, and T. The theca cells, like the granulosa cells when they form the corpus luteum, may become luteinized, i.e. hypertrophied, vacuolated, with lipid-rich cytoplasm and produce more P and subsequent androgenic steroids. The origin of estradiol is less certain; it is probably produced by the granulosa cells from A and possibly also in the theca and stroma from A and T.[1] Androgen influence favors atresia of the follicles and atretic follicles form more stroma.

Polycystic ovarian syndrome ● In 1935 Stein and Leventhal described a syndrome associated with menstrual irregularity, infertility and hirsutism and accompanied by enlarged pearly white ovaries with thick glistening capsules and multiple cysts.[2] This became known as the Stein-Leventhal syndrome or polycystic ovarian disease (PCOD) and the most common abnormality associated with hirsutism and anovulation. It has now become recognized that this disorder actually represents a multi-faceted syndrome with variations in clinical presentation, predominant histologic findings and also apparently differences in basic etiology (Table 3). Therefore, the term polycystic ovarian syndrome (PCOS) is probably better nomenclature. In all these variations, the ovaries tend to show collagenization of the cortex, often referred to as "thickening of the capsule."

"Classic PCOD" is characterized by an ovarian histology exhibiting a predominance of follicular cysts and follicular hyperthecosis (luteinized cells located adjacent to the follicles). The ovaries are usually but not always enlarged; size may be dif-

ficult to ascertain in the presence of obesity which often accompanies this disorder. It is commonly associated with irregular menses and anovulation-although there may be intermittent periods of fertility-hirsutism, but generally not virilization. Laboratory findings reveal elevated LH and estrone (E_1), normal or borderline high A,T, and 17KS. Even if T is normal, free T is usually increased with low sex hormone binding protein. LH characteristically responds to LRH with marked elevation indicating a primed state of this gonadotropin. Many hypotheses have been advanced to explain the pathogenesis of this syndrome. According to one, excess A production by the ovaries is the initial event; this results in elevation of E_1, formed by peripheral conversion from A, and therefore the high continuous estrogen level results in decrease in FSH and elevation of LH with loss of cyclicity. This latter statement is based on work indicating that FSH is more sensitive to the negative feedback of estrogen than LH and is inhibited by levels that stimulate LH,[3] and that when the decreased secretion of FSH is corrected by exogenous FSH or clomiphene ovulation may occur.[4] It is understood how this disorder can perpetuate itself, as increase in LH could stimulate the ovary to produce more A; an increase in androgen in the ovary leads to follicular atresia which results in increase in the theca cell mass and therefore further increase in A production. Since the fat cell is an important area of conversion of A into E_1 this fact appears consistent with the finding of obesity in a significant percentage of these patients. This postulate, however, leaves unclear the cause of the initial excess ovarian production of A. One suggestion is that the adrenal androgen surge that normally occurs at the adrenarche may be of excessive degree and thus the initiating event in the pathogenesis.[5] This would be consistent with the finding of polycystic ovaries in states of adrenal hypersecretion.[5-7] Increased initial A production might also be due to decreased activity of enzymes necessary for synthesis of estrogen, with resulting accumulation of androgens in the ovary. Others have hypothesized that this disorder may result from hypothalamic-pituitary hormone abnormality, such as a primary derangement of the hypothalamus which would tonically produce LH, and that androgen elevation is secondary to the elevation of LH. Therefore, although it is possible to explain the self-perpetuating nature of this syndrome, the pathogenesis still remains controversial.

PCOD may respond to treatment with clomiphene or wedge resection of the ovary with ovulatory cycles reported in the literature to average 75% with the former and 63% with the latter.[8] This treatment, however, is suitable only if pregnancy is desired because of the side effects of clomiphene and the not infrequent short term only benefit from wedge resection which makes it a treatment of last resort. If pregnancy is not desired, estrogen therapy, in view of its suppressive effect on T and A, given in the form of one of the oral combination contraceptive agents, as Ortho-Novum 2 mg, appears the treatment of choice to produce regular menses and suppress androgens.[9-11] The response of hirsutism to these methods of treatment is considerably less satisfactory. A period of around one year after wedge resection or initiation of estrogen is required to see any improvement which occurs only in a minority, aproximately 10%-20%. New methods of treatment for hirsutism in general will be discussed later. Nightly dexamethasone has been tried in an attempt to reduce hirsutism and normalize menses; however, suppression of A and T by glucocorticoids in this disorder is, in most cases, only slight and use of long term dexamethasone is generally not therapeutically effective.[12]

Table 3.—Summary of Main Clinical and Laboratory Features of Syndromes Associated with Hirsutism.

Syndrome	Polycystic Ovaries	Infertility	Virilization	Unilateral Mass	Plasma T		Plasma A		Serum Prolactin	170HP Response to ACTH
					Nor. to sl. ↑	≥200 ng/ml	Nor. to sl. ↑	≥800 ng/ml	≥100 ×	
Classic PCOD	+	±	–	–	+	–	+	–	–	N
Hyperthecosis	±	±	±	–	±	±	±	±	–	N
Pituitary Adenoma	±	+	–	–	+	–	+	–	–	
Attenuated CAH	±	±	±	–	±	±	±	±	+	N
Ovarian Tumor	rare	+	+	+	–	+	+	–	–	N
Adrenal Tumor	rare	+	+	+	+	–	–	+	–	N

Ovarian stromal hyperthecosis ● The syndrome which has been designated ovarian stromal hyperthecosis is characterized by ovarian histology which may contain all the features of classic PCOD, but has been differentiated from it by the predominance of stromal hyperplasia containing nests of luteinized cells at a distance from the follicles and ovaries which may or may not be either enlarged or cystic.[13-15] This disorder is more apt to have higher androgen levels and therefore frank virilization; in some cases values of A and/or T have been high enough to suggest an ovarian or adrenal tumor,[16] although in others levels were similar to PCOD. The elevated A and T levels in this syndrome have been reported to be nonsuppressible with dexamethasone but stimulated by HCG, compatible with an ovarian origin. They have been suppressed with estrogen in some cases and not in others.[16] LH may be either normal or elevated. Hyperthecosis is often associated with menstrual abnormalities and infertility although regular menses and pregnancy may occur. It may be familial as may also be PCOD.[15] These two disorders, it can be seen, have indefinite borders and can be differentiated definitely only by histologic examination at wedge resection, although marked androgen elevation favors hyperthecosis. Hughesdon, after studying the morphology of ovarian wedges from 34 cases of PCOD, described the basic pathologic process to be excessive follicular maturation and ensuing atresia leading to progressively more stroma, with lutein cell nests found in 80% of the cases, and hypothesized that the hyperthecosis syndrome may be simply a late stage of classic PCOD.[17]

Hyperthecosis may occur in postmenopausal women and the hirsutism has sometimes been of marked degree and associated with virilization.[16] It is possible that in such cases the androgen producing stromal hyperplasia that has been described in the postmenopausal ovary may aggravate an already existing hyperthecosis.[16] Both PCOD and hyperthecosis may be associated with a luteoma, an aggregation of luteinized theca cells at the transition point between hyperplasia and tumor, which may occur in the young or in the postmenopausal, excrete high levels of androgen and may be estrogen suppressible.[9] Similar to this is the luteoma of pregnancy, sometimes referred to as a pseudo tumor, which may regress after delivery and enlarge during a subsequent pregnancy. The finding of endometrial carcinoma in some hyperthecosis cases has also been reported.

Type A insulin resistance with elevated insulin levels and acanthosis nigricans has been described in both PCOD and hyperthecosis.[14,15,18] This type is due to receptor or postreceptor defect and not to antibody formation. In such cases fasting blood glucose is frequently normal with elevated insulin levels. Glucose intolerance may or may not be present and frank diabetes has been reported in some cases, as has a family history of diabetes. After wedge resection or oophorectomy the elevated insulin, abnormal glucose tolerance, or diabetes mellitus has been reported to be ameliorated in some, although generally only transiently, while others have been reported not to respond.[16] Existence of a relative insulin resistance is probably commoner in the hyperandrogenic syndromes than was formerly realized because its presence was not investigated. Some degree of glucose intolerance appears to be commonly found if an oral glucose tolerance test is done in these syndromes, with higher blood glucose levels reported than in obese controls.[19] Likewise, acanthosis nigricans may be minor in degree and missed unless specifically sought.[14]

The explanation for a relationship between insulin resistance and hyperandrogenism is unknown. In one study it was shown to correlate with the plasma levels of testosterone[19] but others have not found this correlation.[14] It has been suggested that perhaps chronic androgen excess may lead to cellular resistance to insulin, or conversely that the theca cells of the ovary may be responding to the nonspecific growth factor action of insulin. Consistent with this latter hypothesis is the finding of acral changes suggestive of acromegaly in some of these patients.[16,20]

The treatment of hyperthecosis is similar to classic PCOD; it has been reported to be less likely to respond to clomiphene; some cases have responded well to wedge resection while others have not or the procedure has failed to produce permanent control.[14,15] Estrogen preparations have been helpful in some cases and should be tried.[10]

Pituitary adenoma ● Polycystic ovaries and hirsutism have also been found in a few cases of pituitary adenoma, with elevated prolactin and galactorrhea, in which the ovarian disorder preceded the finding of the adenoma by some years.[21] These cases did not respond with either menses or ovulation to clomiphene or wedge resection. LH was normal or decreased. It may be hypothesized that in such cases PCOS might have been the initial event and the unopposed estrogen, by chronic stimulation, resulted in elevated prolactin levels leading to a prolactin producing tumor. On the other hand, the elevated prolactin may have led to pituitary acyclicity with abnormal steroid hormone production resulting. Cases of polycystic ovaries with amenorrhea, galactorrhea and elevated prolactin without evidence of pituitary tumor have been described and have responded to wedge resection or bromcryptine with regular menses.[21]

Congenital adrenal hyperplasia ● A presentation that is clinically indistinguishable from PCOS may occur in one variation of congenital adrenal hyperplasia (CAH). The classic form of this disorder, consisting of hirsutism and virilization starting in prenatal life or early childhood, and the most common cause of female pseudohermaphroditism, will not generally be seen as an initial diagnostic case in adult medicine. The most common enzyme deficiency associated is a partial 21-hydroxylase deficiency which is compensated for by an increase in ACTH stimulation thus leading to return of cortisol levels to normal and subsequent stimulation of the androgen pathway (Table 1). A severe variation in this enzyme defect may result in the salt losing syndrome. Recently it has been recognized that a very mild variation may be manifested only by hirsutism, sometimes mild and generally starting at puberty, oligomenorrhea and infertility, although intermittent fertility may also be present. This has been named "late onset" or "attenuated" CAH. Clinically it may not only mimic PCOS but may also be associated with polycystic ovaries[5,22] as may also the classic form of CAH in the untreated adult woman.[6] The diagnosis of attenuated CAH rests on the finding that 17OHP, whose basal levels may or may not be elevated, will increase one hundred times or more after ACTH stimulation (using IV bolus of 0.25 mg cosyntropin). This differentiates it from the previously described androgenic syndromes in which 17OHP may sometimes be mildly elevated in the basal state, but will rise only two or three times after ACTH.[5,22] The mechanism for the late onset of this form of CAH has been hypothesized to be initially a slight elevation of the androgens, associated with the mild enzymatic defect, which is aggravated by the increased adrenal androgen output at adrenarche. CAH is familial and linked to the HLA antigen, the attenuated form being an allelic variant of the classic.[22] There are some members of families with this gene who may have both the genetic and hormonal findings of attenuated CAH but be entirely asymptomatic (referred to in the literature as cryptic) and as such require no treatment. Although hirsutism and infertility due to this disorder occur only in a minority of apparent PCOS cases (6%-12%), its recognition is important, as treatment with dexamethasone .5 to .75 mg nightly will restore the androgen output to normal, produce normal menses and ovulation and amelioration of the hirsutism.

Ovarian or adrenal tumor ● The possibility of functioning ovarian or adrenal tumor must always be considered in hirsutism, especially if virilization is present and of rapid onset, serum T is over 200-300 ng/100 ml or there is marked elevation of other adrenal androgens. In such cases, if a unilateral mass is not elicited by physical examination, search is indicated by appropriate methods as ultrasound, CT scan and ovarian laparoscopy. Selective catheterization of adrenal and ovarian veins and bilateral sampling has been done for diagnostic purposes, but may be technically difficult and interpretation complicated by the variability of ovarian and pulsatility of the adrenal hormone secretion. While it can be kept in mind as a general rule that virilizing ovarian tumors secrete testosterone as a primary androgen whereas adrenal tumors secrete A and DHEA, variations in this do occur, an example being the testosterone producing adrenal adenoma. Tests designed to diagnose adrenal tumors by dexamethasone suppression and ovarian tumors by HCG stimulation or estrogen suppression may not be reliable as some ovarian tumors may suppress with dexamethasone and the testosterone producing adrenal adenoma tends to be stimulated by HCG. Rarely, adrenal and ovarian tumors have been associated with polycystic ovaries.

Idiopathic hirsutism ● Finally, there remains a nebulous entity called "idiopathic hirsutism." This term has been used to categorize the hirsutism associated with regular menses, fertility, normal sized ovaries, lack of definite elevation of steroids and often a family history of hirsutism. It has been hypothesized that there may be a genetically determined increased end organ response to a normal amount of androgens—such hypothesis resting on the well-known racial variations of body hair as well as the observation that the degree of hirsutism may not correlate with the height of the androgen level. Undoubtedly some of these cases, especially in the earlier literature, were idiopathic because sufficient diagnostic tests were not done. As the fat cell is also the site of the peripheral formation of testosterone from androgenic prehormones, it is understandable how some appear associated with obesity and do respond to weight loss. Some may be a mild variant of one of the previously discussed syndromes, as there frequently appears to be a subtle increase in androgen production. Recent work suggests abnormality of peripheral androgen metabolism in the target tissue, with increased amount of the T metabolite, 3α, 17βandrostenediol glucuronide, being produced in the skin in idiopathic hirsutism.[23]

Therapy ● Hirsute women who are otherwise asymptomatic and whose workup is negative should probably best be advised to have simple removal of hair. Electrolysis devices are now available for home use. The same advice may be indicated also for the hirsutism component in the previously described hyperandrogenic syndromes due to the frequent poor response of this feature to hormonal therapy, excluding of course those with attenuated congenital adrenal hyperplasia or tumors.

In the last few years new methods of therapy for hirsutism, regardless of the cause have been advanced. Medroxyprogesterone acetate (Provera) in dosage of 10 mg three times daily has been stated to reduce the serum testosterone level and improve hirsutism.[24] Explanations given for this effect consist of blocking of LH, increase in metabolic clearance rate of testosterone and decreased testosterone production. Spironolactone in dosage of 200 mg per day has been reported to produce improvement in hirsutism.[25] Smaller doses may also be effective. Two sites of action have been advanced to explain its effect: decrease in biosynthesis of androgens by enzymatic inhibition, and displacement of dihydrotestosterone (DHT) from the androgenic receptors present in the hair follicles. Cimetidine has been reported to have the latter effect only; one reports claims use of this drug in dosage of 300 mg five times daily for three months produces a decrease of 64% in the rate of hair growth without any affect on the androgen levels.[26] Reports from Europe on the use of the antiandrogen, Cyproterone acetate, indicate rapid amelioration of hirsutism whether or not it is associated with elevated androgen levels.[27] This drug appears to both decrease androgen secretion and to have a peripheral antiandrogen effect by interferring with the binding of androgen to the receptor. Side effects may include fatigue, asthenia, weight gain and loss of libido, as well as decreased adrenal reserve due to pituitary ACTH suppression. Cyproterone is not available in this country, and, as the previously mentioned drugs have not been approved for treatment of hirsutism, use would require informed consent as well as consideration of the possible side effects of each drug and whether such possibility justifies the desired benefit.

References

1. DeGroot, L.J.; Endocrinology: 364, Grune and Stratton, New York, 1979.
2. 5tein, 1.F. and Leventhal, M.L.: Amenorrhea Associated with Bilateral Polycystic Ovaries, Am.J. Obst. Gynec. 29:181, 193S.
3. Lasley, B.L.; Wang, C.F.; and Yen, S.5.C.: Effects of Estrogen and Progesterone on Functional Capacity of Gonadotrophs, J. Clin. Endocrinol. Metab. 41:820, 197S.
4. Baird, D.T.; Corker, C.S.; Davidson, D.W.; Hunter, W.M.; Michie, E.A., and Van Look, P.F.A.: Pituitary Ovarian Relationships in Polycystic Ovary Syndrome, J. Clin. Endocrinol. Metab. 45:798, 1977.
5. Chrousos, G.P.; Loriaux, D.L.; Mann, M.D., and Gordon, B.C., Jr.: Late Onset 21 Hydroxylase Deficiency Mimicking Idiopathic Hirsutism or Polycystic Ovarian Disease, Ann. Intern. Med. 96:143, 1982.
6. Lucis, O.J.; Hollenberg, C.H.; MacDonald, S.A., and Blahey, P.: Polycystic Ovaries Associated with Congenital Adrenal Hyperplasia, Can. Med. Assoc. J. 94:1, 1966.
7. Perloff, W.H.; Channick, B.J.; Hadd, H.E., and Nodine, J.H.: Stein Leventhal Ovany. Manifestation of Hyperadreno-corticism, Fertil. Steril. 9:247, 1958.
8. Goldzieher, J.W. and Green J.A.: Polycystic Ovary. 1. Clinical and Histologic Features, J. Clin. Endocrinol. 22: 325, 1962.
9. Givens, J.R.; Kerber, I.J.; Wiser, W.L.; Anderson, R.N.; Coleman, S.A., and Fish, S.A.: Remission of Acanthosis Nigricans Associated with Polycystic Ovarian Disease and a 5tromal Luteoma, J. Clin. Endocrinol. Metab. 38:347, 1974.
10. Givens, J.R.; Anderson, R.N.; Wiser, W.L.; Umstot, E.S., and Fish, S.A., Effectiveness of Two Oral Contraceptives in Suprressing Plasma Androstenedione, Testosterone, LH, and FSH, and in Stimulating Plasma Testosterone Binding Capacity in Hirsute Women, A.J. Obstet. Gynecol. 124:333, 1976.
11. Wild, R.A.; Umstod, E.S.; Anderson, R.N., and Givens, J.R.; Adrenal Function in Hirsutism, II. Effect of Oral Contraceptive, J. Clin. Endocrinol. Metab. S4:676, 1982.
12. Lachelin, G.C.L.; Judd, H.L.; 5wanson, 5.C.; Hauck, M.E.; Parker, D.C., and Yen, S.S.C.: Long Term Effects of Nightly Dexamethasone Administration in Patients with Polycystic Ovarian Disease, J. Clin. Endocrinol. Metab. SS:768, 1982.
13. Frankel, L.: Thecoma and Hyperthecosis of Ovary, J. Clin. Endocrinol. 3:SS7, 1943.
14. Case Records of the Massachusetts General Hospital (case 25-1982) 306:1537, 1982.
15. Judd, H.L.; Scully, R.E.; Herbst, A.L.; Yen, S.S.C.; Ingerson, F.M., and Kliman, B.: Familial Hyperthecosis: Comparison of Endocrinologic and Histologic Findings with Polycystic Ovarian Disease, Am. J. Obstet. Gynecol. 117:976, 1973.
16. Brathwaite, 5.5.; Erkman-Balis, B., and Avila, T.D.: Postmenopausal Virilization Due to Ovarian Stromal Hyperthecosis, J. Clin. Endocrinol. Metab. 46:295, 1978.
17. Hughesdon, P.E.: Morphology and Morphogenesis of 5tein Levanthal Ovary and of 5o-called "Hyperthecosis," Obstet. Gynecol. Surv. 37:59, 1982.
18. Kahn, C.R.: Flier, J.S.; Bar, R.5.; Archer, J.A.; Gorden, P.; Martin, M.M., and Roth, J.: 5yndromes of Insulin Resistance and Acanthosis Nigricans, N. Engl. J. Med. 294:739, 1976.
19. Burghen, G.A.; Givens, J.R., and Kitabchi, A.E.: Correlation of Hyperandrogenism with Hyperinsulinism in Polycystic Ovarian Disease, J. Clin. Endocrinol. Metab. S0:113, 1980.
20. Flier, J.S.; Young, J.B., and Landsberg, L.: Familial Insulin Resistance with Acanthosis Nigricans, Acral Hypertrophy and Muscle Cramps, N. Engl. J. Med. 303:970, 1980.
21. Futterweit, W. and Kreiger, D.T.: Pituitary Tumors Associated with Hyperprolactinemia and Polycystic Ovarian Disease, Fertil. 5teril 31:608, 1979.
22. Lobo, R.A., and Goebelsmann, U.: Adult Manifestation of Congenital Adrenal Hyperplasia Due to Incomplete 21-Hydroxylase Deficiency Mimicking Polycystic Ovarian Disease, Am. J. Obstet. Gynecol. 138:720, 1980.
23. Horton, R.; Hawks, D., and Lobo, R.: 3α, 17β Androstenediol Glucuronide in Plasma. Marker of Androgen Action in Idiopathic Hirsutism, J. Clin. Invest. 69:1203, 1982.
24. Ettinger, B. and Golditch, I.M.: Medroxyprogesterone Acetate for Evaluation of Hypertesteronism in Hirsute Women, Fertil 5teril. 28:1285, 1977.
25. Cumming, D.C.; Yang, J.C., Rebar, R.W., and Yen, 5.5.C: Treatment of Hirsutism with Spironolactone, JAMA 247:129S, 1982.
26. Vigersky, R.A.; Mehlman, I.; Glass, A.R., and Smith, C.E.: Treatment of Hirsute Women with Cimetidine, N. Engl. J. Med. 303:1042, 1980.
27. Kuttenn, F.; Rigaud, C.; Wright, F., and Mauvais-Jarvin, P.: Treatment of Hirsutism by Oral Cyproterone Acetate and Percutaneous Estradiol, J. Clin. Endocrinol. S1:1107, 1980.

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Superior vena cavogram analysis in superior vena cava syndrome

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ABSTRACT: Bronchogenic carcinoma is implicated in 75-90% of recent cases of superior vena cave (SVC) syndrome. A tissue diagnosis is mandatory before initiating treatment since effective therapy is inherently risky.

In 17 patients with SVC syndrome, superior vena cavograms were analyzed to determine the safest surgical approach for obtaining a definitive diagnosis. Venous collaterals were scored as follows: 0-none, 1-mild, 2-moderate, 3-severe. The following mean scores were obtained: supraclavicular—2.41, axilla—2.00, mediastinal—1.89, and anterior chest wall—0.70. Two venous obstructive patterns were identified: Type I—significant mediastinal and supraclavicular collaterals and Type II—SVC thrombosis with major venous collaterals in the neck and axilla.

Superior vena cavograms are recommended in planning the operative diagnostic procedure. A limited anterior thoracotomy is the safest approach according to venous collateral analysis. Considerable mediastinal collaterals may prohibit the routine use of mediastinoscopy in Type I SVC syndrome.

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Superior vena cava syndrome complicates 5% of all lung carcinoma.[1,2] Thirty percent of recent cases were reported due to small cell carcinoma which requires specific therapy.[3] A histological diagnosis is mandatory before initiating therapy since serious side effects may be observed in patients with benign lesions.[2,4] Superior vena cavograms were reviewed as an aid in planning the surgical approach for obtaining diagnostic tissue when nonoperative methods fail. We herein report our experience with 17 cases of SVC syndrome. The role of mediastinoscopy as a diagnostic modality is addressed.

Materials and methods ● Between 1975-1981, superior vena cavograms were performed in 17 patients with SVC syndrome by the injection of 50 cc of 0.3% strength Conray-43 (lothalamate meglumine injection, USP 43%) in each antecubital fossa. Each patient's arms were raised for two minutes above the head, and serial chest films were taken with the patient in the upright position.

Venous collateral pathways were retrospectively analyzed by two radiologists for distribution in four anatomical regions: anterior chest wall, mediastinum, axilla and supraclavicular area (Fig. 1). The extent of collateral pathways was numerically scored as follows: 0-none, 1-mild, 2-moderate, 3-severe.

Results ● Of the 17 patients the mean tabulated scores of superior vena cavogram collateral analysis in the four anatomical areas were as follows: neck—2.41, axilla—2.00, mediastinum—1.89, and anterior chest wall—0.70 (Table 1). The degree and location of collateralization are dependent upon severity of venous obstruction. Two distinct pat-



Fig. 1—Anatomical regions of venous collateral pathway analysis: (1) mediastinum, (2) anterior chest wall, (3) supraclavicular region, and (4) axilla.

terns of collateral formation were identified: Type I—significant mediastinal collaterals with minimal venous thrombosis, and Type II—marked venous thrombosis without evidence of mediastinal collaterals.

In Type I SVC syndrome onset of symptoms was insidious, degree of thrombosis minimal, and location of substantial venous collaterals limited to the mediastinum and supraclavicular areas (Fig. 2). Ten of 17 patients (59%) exhibited this pattern. An analysis of the mean venous collateral scores revealed: mediastinum—2.6, neck—2.2, axilla—1.6, and anterior chest wall—1.0 (Table 1).

In Type II SVC syndrome clinical onset was abrupt with thrombosis of the superior vena cava and the innominate or subclavian veins (Fig. 3). Seven of 17 patients (41%) revealed this pattern; major collaterals were observed in the axilla and neck with minimal mediastinal involvement. A mean venous collateral analysis revealed: axilla—2.5, neck—2.4, mediastinal—1.0, and anterior chest wall—0.28 (Table 1). In both Type I and Type II the anterior chest wall was spared of extensive venous collaterals.

Comments • Specific anatomical relationships are important in both the development of SVC syndrome and the risk of hemorrhage from operative diagnostic procedures. Roswit described the venous return from the upper body via four principal collateral pathways: azygos, internal mammary, long thoracic, and vertebral systems.[5] Each system is interconnected to allow collateral pathway decompression. When SVC obstruction is above the azygos system, blood is shunted from the superior intercostal veins into the azygos vein then back to the heart minimizing anterior chest wall collateral formation.[5] The degree of collateralization depends upon the severity of obstruction and extent of azygos vein involvement. Variation between individual cases is the rule.

Table 1.—Venous Collateralization Analysis; 17 Cases Superior Vena Cava Syndrome.

Anatomical Region	Type I (10)	Type II (7)	Mean (17)
Neck	2.2	2.4	2.41
Axilla	1.6	2.5	2.00
Mediastinum	2.6	1.0	1.89
Anterior Chest	1.0	0.28	0.70

Collateral Code: 0-None 2-Moderate 1-Mild 3-Severe

Traditionally, emergency radiation therapy was advocated in SVC syndrome to hasten clinical resolution.[6,7] The ominous nature of the syndrome relates to the underlying malignancy rather than the compromised venous return. When bronchoscopy, needle biospy, and sputum cytology are negative for malignant tissue, operative diagnostic procedures are required. The most efficacious of numerous reported procedures has yet to be determined.

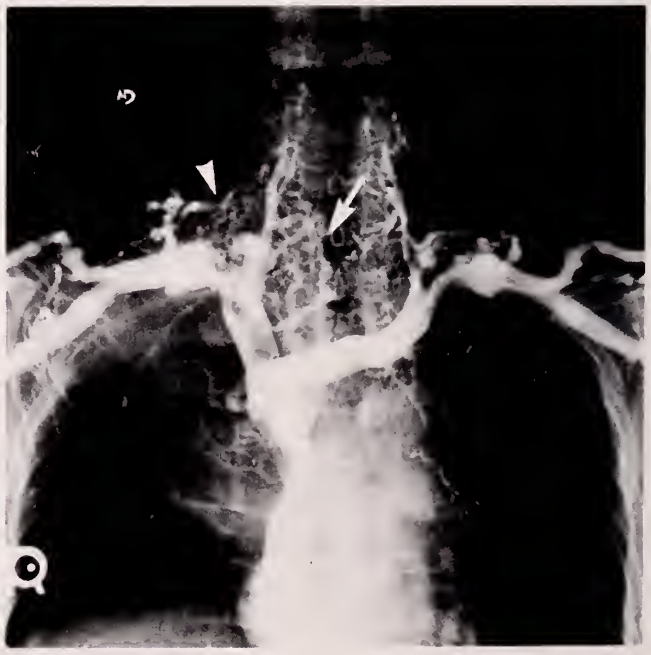


Fig. 2—Superior vena cavogram from patient with Type I SVC syndrome depicting mediastinal (arrow) and supraclavicular (arrowhead) collaterals.



Fig. 3—Superior vena cavogram from patient with Type II SVC syndrome depicting superior vena cava thrombosis (arrow) and absence of mediastinal collaterals.

A preoperative superior vena cavogram provides two types of useful information. First, by demonstrating collateralization, it gives pertinent information concerning the degree and location of thrombosis and venous obstruction. Secondly, it provides information to the radiotherapist for designing radiation portals. Two distinct patterns of collateral formation were documented in this analysis. In Type I SVC syndrome, moderate to severe venous collateralization was located in the neck and mediastinum. SVC syndrome, Type II, exhibited extensive axillary and supraclavicular venous collateral pathways without evidence of mediastinal collaterals.

The safe use of mediastinoscopy for obtaining diagnostic tissue in patients with SVC syndrome is reported as having minimal morbidity and no mortality. All case reports confirm that meticulous dissection is required through edematous friable tissue with markedly dilated superficial veins under elevated pressures. Cavogram analysis reveals collaterals located in deep and hard to visualize anatomical regions in Type I obstruction. Because of the risk of substantial hemorrhage from these procedures, we feel mediastinoscopy or supraclavicular approach with biopsy should be contraindicated in Type I obstruction. This is in agreement with previous reports.[9] In Type II the risk of serious hemorrhage precludes transaxillary or supraclavicular approach for diagnosis. Mediastinoscopy is applicable in Type II SVC syndrome because of superficially located collaterals, but it requires meticulous surgical technique. We have documented minimal anterior chest wall involvement by venous analysis and prefer a mini-anterior thoracotomy with open biospy to obtain diagnostic tissue. This approach allows adequate exposure of a defined anatomical area, offers direct visualization of biopsy sites, transverses the least vascular region and aids in the capability of controlling any substantial life-threatening hemorrhage.

Summary • SVC syndrome is a serious complication of carcinoma of the lung. Emergency radiation therapy is rarely indicated. Accurate histologic diagnosis assumes major importance prior to recommending appropriate therapy. Superior vena cavograms are recommended in all patients with SVC syndrome especially those undergoing operative diagnostic procedures. They aid in planning surgical intervention by depicting major collateral pathways. Two types of SVC syndrome with differing locations of collaterals have been observed. The anterior chest wall showed minimal collateral involvement in both types. Consequently, we advocate the mini-anterior thoracotomy for obtaining diagnostic tissue in SVC syndrome secondary to operative exposure through minimally collateralized regions.

Results of this superior vena cavogram analysis indicate that mediastinoscopy is contraindicated in Type I and hazardous in Type II SVC syndrome. Prospective studies are required to determine the role of mediastinoscopy in SVC syndrome and its incidence of life-threatening hemorrhage.

References

1. Longacre, A.M. and Shockman, A.T.: Superior Vena Cava Syndrome and Radiation Therapy, Radiology 91:713-718, 1968.
2. Lewis, R.T.; Sisler, G.E. and Mackewzie, J.W.: Mediastinoscopy in Advanced Superior Vena Cava Obstruction, Ann. Thor. Surg. 32:458-462, 1981
3. Lockridge, S.K.; Knibble, W.P. and Doty, D.B.: Obstruction of Superior Vena Cava, Surgery 35:14-24, 1979.
4. Nogeire, C.: Mincer, F. and Botstein, C.: Long Survival in Patients with Bronchogenic Carcinoma Complicated by Superior Vena Cava Obstruction, Chest 75:325-329, 1979.
5. Roswit, B.; Kaplan, G. and Jacobson, H.G.: Superior Vena Cava Obstruction in Bronchogenic Carcinoma: Pathological Physiology and Therapeutic Management, Radiology 61:772-736, 1953.
6. Davenport, D.; Ferree, C. and Blake, D., et al: Response of Superior Vena Cava Syndrome to Radiation Therapy, Cancer 38:1577-1580, 1976.
7. Perez, C.A.: Carlos, A. and Presant, C.A.: Management of Superior Vena Cava Syndrome, Semin. Oncol. 5:123-134, 1978.
8. Kirschner, P.A.: Mediastinoscopy in Superior Vena Cava Obstruction. In Mediastinoscopy, Jepsen, O. and Sorenson, K.D., (ed.), Odense University Press, pp.40-42, 1971.
9. Borouchow, I.B. and Johnson, J.: Obstruction of Vena Cava, Surg. Gynecol Obstet. 134:115-121, 1972.

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Bupropion: study of treatment in depressed patients

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ABSTRACT: Bupropion (WELLBUTRIN®), a new, nontricyclic antidepressant, was evaluated for safety and efficacy among 33 mildly/moderately depressed outpatients being treated by nonpsychiatrist physicians in private practice. Although the patients varied widely in ages, diagnoses, and depressive symptoms, bupropion consistently alleviated the depression while producing minimal side effects.

Depression is one of the ten most common diagnoses made by family practice physicians and an estimated 15-30% of their patients exhibit clinically significant symptons.[1-3]

The diagnosis is usually based upon the presence of depressive symptoms: mood, fatigue, gastrointestinal disturbances, anxiety, sleep disorders, and pain of a nonorganic origin. When such symptoms persist longer that two weeks in the absence of any apparent organic cause, they are most likely to be the result of depression.

Once the diagnosis has been established, the physician is faced with the problem of treatment. Ideally an antidepressant would effectively treat the condition while producing minimal side effects, be safe in overdose, and would not interact adversely with concomitant medications.

One drug that appears to meet these requirements is bupropion (WELLBUTRIN®), a nontricyclic antidepressant with a novel molecular structure and neurochemical profile which is currently undergoing final FDA review.[4,5] Bupropion's effectiveness has been demonstrated in numerous clinically controlled trials. Doses of 300-450 mg/day produced antidepressant effects within three to five days and 70% of patients experienced substantial clinical benefits within a month. Bupropion studies in animal and human subjects show no cardiotoxic, sedating or stimulating effects, and minimal anticholinergic properties.[6-8]

Controlled studies with amitriptyline indicate that bupropion has comparable antidepressant activity while producing fewer adverse drug-related experiences and no weight gain.[9]

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TABLE 1—Schedule of Assessments

Assessment	Study Day 1	8	15	29*
Demographic data	X			
Physical examination	X			X
Vital signs	X	X	X	X
Hamilton Depression Scale	X			X
Clinical Global Impression Scale	X	X	X	X
Zung Self-Rating Depression Scale	X	X	X	X
Adverse experiences	X	X	X	X
Clinical laboratory tests (hematology, blood chemistry, urinalysis)	X		X	
EKG	X+			X+
EEG	X+			X+
Neurologic examination	X+			X+
Ophthalmologic examination	X+			X+
Medication record	X	X	X	X
Patient termination record				X

*Evaluations performed on day 29 or termination.

+Performed only if a known preexisting abnormality would be reflected in this measure.

The studies demonstrating bupropion's effectiveness and low side effect profile have taken place primarily in academic research settings. Given the apparent potential usefulness for such a drug in general practice settings, this study was designed as an evaluation of bupropion's efficacy and safety in depressed outpatients being treated by nonpsychiatrist physicians in private practice.

Methods ● Thirty-three patients were admitted to the study after signing a Statement of Informed Consent. Exclusion criteria regarding concurrent illness and nonpsychiatric medication were minimal, with no upper age limit for those participating. The protocol was four weeks of treatment with bupropion hydrochloride, 150-450 mg/day, with patient responders having an option to continue treatment in a long-term study. Bupropion was given t.i.d. in 50, 75, or 100 mg tablets with at least six hours between each dose.

Evaluations for efficacy were based on data for patients in the study at least 14 days and for safety on data for patients for whom any such data were generated. Both efficacy and safety data were analyzed according to changes in scores obtained at baseline (study day 1), during treatment (days 8 and 15), and at termination.

The criteria and schedule for assessing these changes are shown in Table 1. Efficacy data included all Hamilton Depression (HAM-D), Clinical Global Impression (CGI) and Zung Self Rating Depression Scores (SDS). Safety data included physical examination results, clinical laboratory evaluations, vital signs, and adverse experiences. Additional examinations (EKG, EEG, neurologic and/or ophthalmologic examinations) were performed when a patient's condition required close monitoring but did not prevent inclusion in the study.

Changes from baseline vital signs and psychiatric scores were analyzed by means of analysis of variance (ANOVA) and changes in baseline clinical laboratory values were analyzed by means of the Wilcoxon Signed Bank Test.

Adverse experiences were recorded on a 59-item check-list. Each event was evaluated for intensity, probability of being treatment related, and any action taken. Total incidence for each event was reported in two ways: as the ratio of the total number of patients reporting the experience/total number of patients assessed (percent of patients) and as the ratio of the total number of reports of an experience/total number of assessments for the experience (percent of assessments).

Results

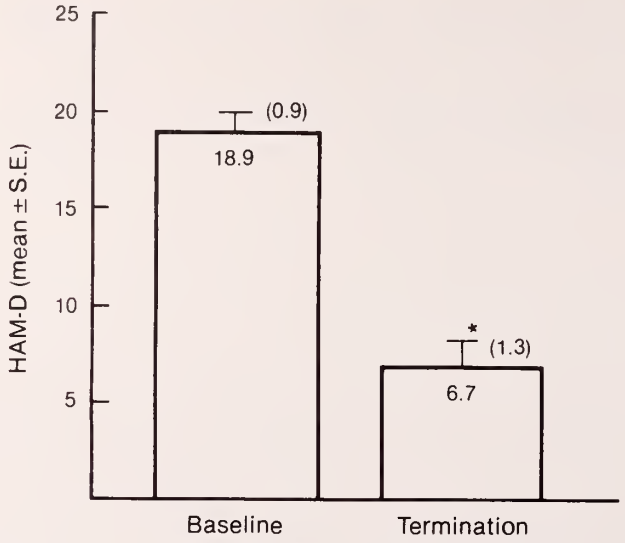
Patients ● The characteristics of the 32 patients evaluated for safety and the 28 evaluated for efficacy are shown in Table 2. The average patient was a 45-year-old woman, white, married, with a skilled occupation and at least a high school education.

TABLE 2—Combined Center Demographic Characteristics for Patients Included in Safety and Efficacy Analyses

Characteristics	Safety No.	Safety %	Efficacy No.	Efficacy %
Number of patients admitted = 33				
Number in analyses	32	97%	28	85%
Sex				
Female	23	72	20	71
Male	9	28	8	29
Race				
Caucasian	31	97	27	96
Negro	1	3	1	4
Other	0	0	0	0
Age (yrs.)				
Mean	44.7	—	44.8	—
Range	18-83	—	18-83	—
Marital status				
Married	19	59	16	57
Single*	13	41	12	43
Occupation +				
Skilled	20	62	17	61
Semi-skilled or unskilled	12	38	11	39
Education +				
High school or above	21	66	19	68
Less than high school	11	34	9	32

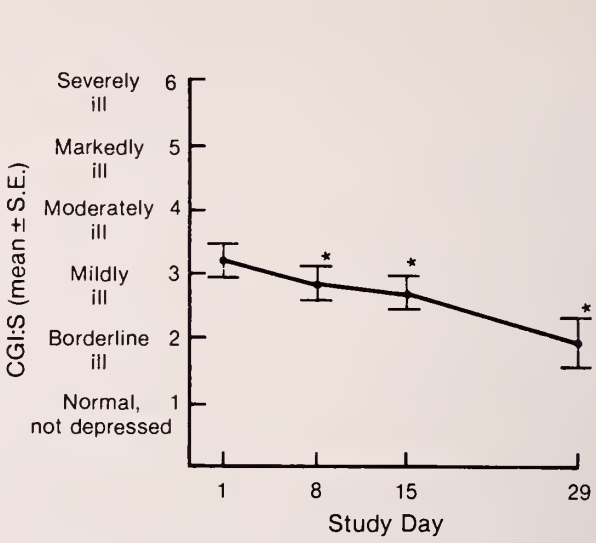
*Never married, separated or divorced, or widowed.

+Categories may not include total number of patients due to missing assessments for some patients.



*Total score is significantly less ($p < 0.05$) than baseline total score.

Fig. 1—Hamilton Depression Scale



*Total score is significantly less ($p < 0.05$) than baseline Severity of Illness Rating.

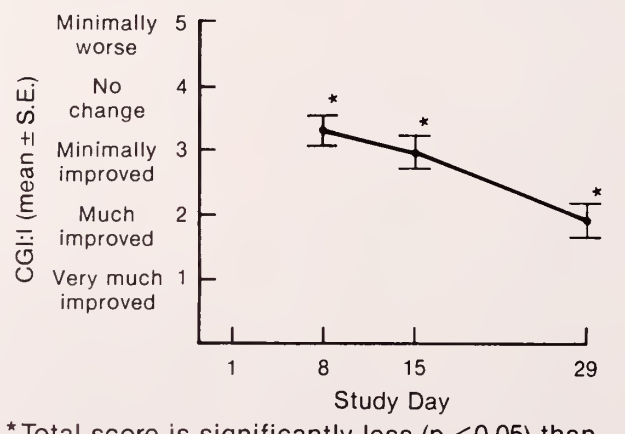
Fig. 2—Clinical Global Severity of Illness Rating

For patients included in the efficacy analysis, the most common disgnosis was a single episode of a major depressive disorder (32%). Other common diagnoses included an adjustment reaction with a brief depressive reaction (25%), anxiety states (21%), and neurotic depression (14%). Diagnoses for single patients (4% each) were a single episode of a manic disorder and neurotic depression. In 68% the condition was the same as or similar to one previously experienced, the average duration of the current episode was 25 months and in most cases (97%) its onset had been gradual or very gradual.

Twenty-four patients (86%) had had no previous psychiatric treatment or outpatient treatment only; four (14%) had been treated as inpatients. The average patient was 44 years old when first treated for psychiatric illness.

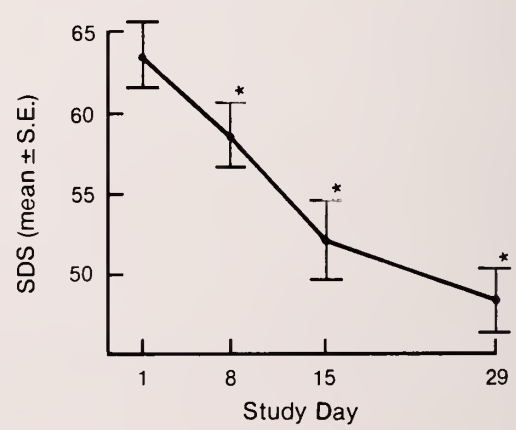
Medication ● The most frequently prescribed dosage among these patients was 300 mg/day. Among the 32 patients in the safety analysis, 17 (53%) were also taking other medication, in five cases (16%) an anxiolytic agent, and in another five cases a cardiovascular agent. There were no reports of any adverse interaction between bupropion and any concomitant medication.

Efficacy ● As shown in Figures 1-4, patients experienced both clinically and statistically significant improvement over baseline scores at each subsequent evaluation point (study days 8, 15, and 29).



*Total score is significantly less ($p < 0.05$) than rating = 4 ("no change").

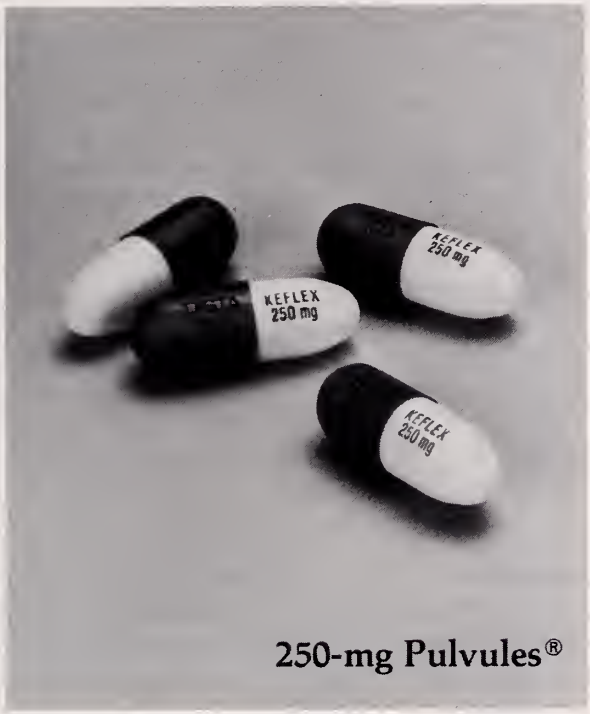
Fig. 3—Clinical Global Improvement Rating



*Total score is significantly less ($p < 0.05$) than baseline total score.

Fig. 4—Zung Self-Rating Depression Scale

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The substantial decrease in mean total HAM-D score from 18.9 ± 0.9 at baseline to 6.7 ± 1.3 at termination was consistent with changes in CGI and SDS scores indicating that the average patient improved from moderately/mildly ill to borderline ill/normal, not depressed (much improved/very much improved) over the period of bupropion treatment. Thus, bupropion treatment seems to reduce depression significantly among patients of varying ages, diagnostic categories, and depressive symptom groups.

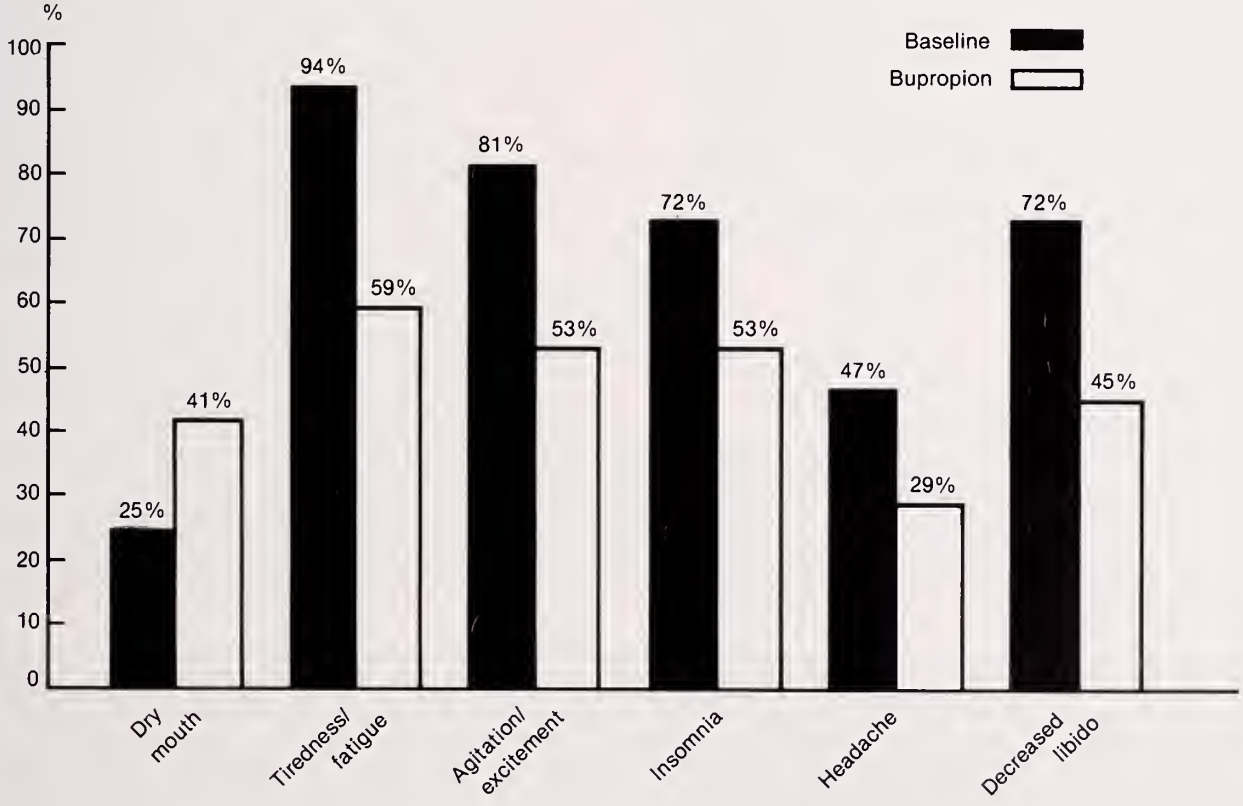
Studies have already shown that bupropion is more active than placebo[8] and produces antidepressant responses comparable to those of high-dose amitriptyline (150-225 mg/day).[9,10] The results obtained in the present study are consistent with that obtained in past trials; the patients were not as ill and are representative of the depressed outpatients likely to be seen by a nonpsychiatrist physician.

Safety ● Analysis of changes in vital signs and laboratory values between entry and termination revealed a single statistically but not clinically significant change in specific gravity of the urine. The average patient experienced a clinically insignificant weight loss of 2.1 pounds over the course of treatment. In no case did either of these changes result in discontinuation of treatment. Analysis of results of all other physical and optional medical evaluations revealed no statistically or clinically significant changes between baseline and termination.

Adverse Experiences ● As determined by percent of patients, four of the adverse experiences most common during treatment occurred more frequently during bupropion treatment than at baseline: dry mouth (+31%), increased libido (+28%), nausea/vomiting (+25%) and decreased appetite/anorexia (+16%). Side effects commonly seen during treatment with tricyclic antidepressant (daytime drownsiness, feeling "doped up," and cardiovascular changes) were absent.

When the incidence of adverse experiences was based on the percent of reports, only one experience showed a small increase during bupropion treatment relative to baseline (dry mouth, +16). As shown in Figure 5, there were notable decreases in other adverse experiences commonly associated with depression: tiredness/fatigue (−35%), agitation/excitement (−28%), insomnia (−19%), headache (−18%), and decreased libido (−27%).

In most cases, adverse experiences either decreased during treatment or were mild enough that patients had little trouble tolerating them.



*Total number reports of an adverse experience/total number of assessments.

Fig. 5—Adverse Experiences: Percent of Assessments*

TABLE 3—Summary of Patients Discontinued Due to Adverse Experiences

Experience*	Number of Patients Reporting+
Nausea/vomiting	3
Numbness	2
Tremor	2
Dry mouth	1
Decreased appetite/anorexia	1
Tingling	1
Total number of patients discontinued because of any adverse experience.....	3

* Adverse experiences reported to be at least possibly drug-related.
+ Patients who were discontinued due to intolerance most often reported more than 1 category of adverse experience. The number of adverse experiences reported at discontinuation for each patient ranged from 1 to 6.

However, three patients felt that side effects were severe enough to warrant discontinuation from the study. The adverse experiences reported by these patients are shown in Table 3.

Discussion ● Bupropion at doses of 150-450 mg/day appears to be a safe and effective antidepressant for treating mild or moderately depressed outpatients. The marked reduction in symptoms demonstrated by the HAM-D, CGI, and SDS scores attests to its antidepressant activity. The lack of any clinically significant changes in vital signs, laboratory values, body weight, or physical examination results confirms its saftey.

Only one adverse experience (dry mouth) was shown by both percent of patients and percent of reports to occur more frequently during treatment than at baseline, while there were marked decreases in depressive symptomatology. The three patients (9%) who discontinued treatment because of adverse experiences comprised a portion of the patient population similar to that discontinued from previous placebo-controlled trials because of "side effects." There were no reports of adverse drug interactions among the 53% of patients taking concomitant medications.

Bupropion thus appears to produce appreciable antidepressant effects safely and with minimal adverse experiences.

References

1. Marsland DE, Wood M, Mayo F: Content of family practice: Part I: Rank order of diagnosis by frequency. 3:37-68, 1976.
2. Wright JH, Bell RA, Kuhn C: Depression in family practice patients. 73(8):1032-1034, 1980.
3. Barber JH: Depression in general practice. 63:441-446, 1981.
4. Soroko FE, Mehta NB, Maxwell RA et al.: Bupropion hydrochloride (± -t-butylamino-3-chlorpropiophenone HC1): A novel antidepressant. 29:767-770, 1977.
5. Ferris RM, Maxwell RA, Cooper BR et al.: Neurochemical and neuropharmacological investigations into the mechanisms of action of bupropion HC1, a new atypical antidepressant agent, In Costa E, Racagni G (eds): Vol. 1. Typical and Atypical Antidepressants: Molecular Mechanisms, New York, Raven Press, 1981.
6. Fann EW, Schroeder DH, Mehta N et al.: Clinical trial of bupropion in the treatment of depression. 23:222-229, 1978.
7. Fabre LF, McLendon D: Double-blind placebo-controlled study of bupropion hydrochloride (Wellbutrin) in the treatment of depressed inpatients. 23:393-402, 1978.
8. Zung WWK: Review o;f placebo controlled trials with bupropion. 1982 (in press).
9. Mendels J, Amin M, Chouinard G et al.: A comparative study of bupropion and amitriptyline in depressed patients. 1982 (in press).
10. Davidson J, Miller R, Van Wyck Fleet J et al.: A double-blind comparison of bupropion and amitriptyline in depressed inpatients. 1982 (in press).

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SPECIAL ARTICLE

Prospective reimbursement and diagnosis-related groups (DRGs)

James F. Richards Jr., M.D.

Chairman McKnight and Members of the Task Force:

My name is James F. Richards Jr., M.D. I am a practicing orthopedic surgeon in Orlando, Florida; Vice President of the Flordia Medical Association; and Chairman of the FMA Committee on Workers' Compensation. The Florida Medical Association is pleased to have this opportunity to comment on the issue of prospective reimbursement.

Mr. Chairman, "prospective reimbursement" has become a common name for various approaches for determining the amount that will be paid for services rendered in hospitals before the services are rendered. Prospective reimbursement is in direct contrast to the method used in Medicare, prior to the recent implementation of PL 97-248 which generally paid hospitals for services on a retrospective basis. The cost was calculated after the care was provided.

Most existing prospective payment systems in this country are based on state rate-setting laws, which establish a rate of payment for a given hospital based on review of the hospital budget by a state commission; and which require third-party payors in the state to pay a fixed amount. As you have heard from previous speakers, New Jersey and Maryland probably have the most experience with this program.

The characteristics of a prospective system have been extolled and criticized over the years. Depending upon the form, these characterizations have varied in degree. What is apparent and of concern to those of us who practice medicine is the lack of adequate analysis of the various "experiments" to date. Although a number of individual states have been testing the prospective approach (including Florida, Kentucky, Maryland, Wisconsin, Alabama, Mississippi, Missouri, Massachusetts, New York and New Jersey), many of these systems have only a few years experience or less and have limited these programs to either Medicaid or Medicare hospital expenditures. Thus, there appears to be no consensus as to the full impact of these programs to date.

What is apparent and of concern to those of us who practice medicine is the lack of adequate analysis of the various "experiments" to date.

For example, the Winter 1981 issue of *Health Care Financing Review*, published by the Department of Health and Human Services, contains an analysis of hospital payment programs in Arizona, Connecticut, Indiana, Kentucky Maryland, Massachusetts, Minnesota, New Jersey, New York, Rhode Island and Wisconsin. This study points to various levels of savings realized in each of these states. However, the same study points out a significant flaw in the research to date on prospective payment. This relates to how the reimbursement mechanism has affected the quality of care available. The study concluded, quote:

> "We have examined only part of the evidence that deals with the effects of prospective reimbursement programs, and the results we presented in this paper are preliminary. In later phases of the national hospital rate-setting study, better data will be available for analysis and we will undertake a much more comprehensive examination of program effects. Until an analysis has been made of the effects of prospective reimbursement programs on the quality of care, on the acces-

The Author
JAMES F. RICHARDS JR., M.D.
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This material was presented to the Florida Task Force on Competition and Consumer Choices in Health Care on January 19, 1983.

sibility of hospital services, and on the financial viability of hospitals, the information necessary for sound policy decision is not complete."

Further complicating one's ability to assess the situation is a puzzling lack of consistency on the part of the Department of Health and Human Services regarding the prospective payment system. On the one hand, the Health Care Financing Administration has published in the October 8, 1982 issue of the *Federal Register* a statement that no more demonstrations are needed except for prospective payment systems with reimbursement based on "Diagnostically Related Groups" (DRGs). Secretary Schweiker has also indicated that the only program he will recommend to Congress this month will be based on DRGs.

Further complicating one's ability to assess the situation is a puzzling lack of consistency on the part of the Department of Health and Human Services regarding the prospective payment system.

These seemingly contradictory statements apparently indicate that none of the former prospective reimbursement projects are viable for national implementation at this time. Instead, Health and Human Services will propose a new system — the only system, however, that by the HHS's own admission needs further demonstration and study.

Speaking on behalf of patients, I would caution the Task Force that it would be inappropriate to institute a radical change in the hospital reimbursement system without assurance that quality of care will be maintained. Also, I would caution against implementing any full-scale prospective payment system in Florida without experimentation and certainly not until ongoing projects have been analyzed to determine the effect on costs and quality. If together we could sit down and design a protocol for conducting some pilot projects in Florida; and if we take into consideration the experiences of Florida Blue Cross and Blue Shield in prospective reimbursement, we could evaluate the impact on costs and quality of care.

Hospital medical staffs, boards, and administrators are likely to respond to changes in the reimbursement system by trying to maintain access and quality care. However, if hospitals find they are being underreimbursed, the likely actions will be shifting costs to other payors in the form of a "sick tax", deferring spending for maintenance, and postponing or eliminating necessary modernization and technological improvements, such as is currently happening in England, — all this, of course, would sooner or later erode quality of care.

Any proposal, if it does not cover all payors, not only in Florida but nationwide, could lead to major cost shifting and encourage a two-tiered system of health care — one level for care of private-pay patients and the other level of care for public patients. If Medicare, Medicaid and other medical programs unique to Florida fail to bear their share of financial responsibility, some hospitals might be discouraged from accepting indigent patients. Hospitals with large public patient loads would encounter increasing difficulty in maintaining financial stability. Other questions that arise include:

1. Would all costs of hospitals be covered adequately, including such costs as teaching programs, paramedic training programs, and capital expenditures?
2. Would there be any adjustment and appeal mechanism?
3. What level of access to care would be acceptable?
4. Would care have to be rationed?
5. Would not hospitals be encouraged to make outlays for improved technology?
6. Would the system make adjustments for hospitals that already have undertaken cost-saving measures and are operating efficiently?

Once again by working together in designing a protocol for conducting some pilot projects in Florida, we could find answers to these questions and give the hospital industry an opportunity to try and work out problems before having an unproven system thrust upon them.

Diagnosis-Related Group concept — We are hearing a lot from Secretary Schweiker and others about the Diagnosis-Related Group concept. This is one of several methods for measuring and categorizing a hospital's patient case mix. Other methods include:

An "Isocost Groups" technique being developed at Johns Hopkins University;

Patient Management Algorithms being developed by Blue Cross / Blue Shield of Western Pennsylvania;

A Disease Staging Technique developed by Systemetrics;

and, Multilevel Care Project of the Veterans Administration.

The DRG approach, the oldest and most widely studied of such techniques, was developed largely at the Yale-New Haven Hospital for the purpose of defining expected length of patient stay, so that utilization review activities could be better targeted on a typical patient. The DRG technique uses medical abstracts to divide all discharged patients into "Major Diagnostic Categories" (MDCs) based on anatomical

and pathophysiological similarities. Subsequently, patients in each MDC are further divided into 467 districts and "Medically Meaningful" Diagnosis-Related Groups (DRGs). Patients in a DRG are considered to be highly similar with respect to the types and quantities of health care resources they consume. They are significantly different from patients in other DRGs. The number of DRGs differ within each MDC. For example, the major diagnostic category, "Diseases of the Bone and Cartilage", consists of five DRGs, while the MDC, "Acute Myocardial Infarction", consists of one DRG.

The DRG technique uses medical abstracts to divide all discharged patients into "Major Diagnostic Categories" based on anatomical and pathophysiological similarities.

We have reviewed a number of publications and reports, and we have talked with representatives of the hospital industry and of the Medical Society of New Jersey. From all this information, it appears that the report prepared by the Department of Teaching Hospitals of the Association of America Medical Colleges outlines best the strengths and limitations of the DRG technique. The major cited advantages of DRGs were summarized in this report as follows:

1. DRGs are conceptually appealing in that they attempt to describe patterns of resource consumption in terms of the similarities among and differences between patients, are based upon patient diagnosis, and consider secondary diagnoses and surgical and medical procedures provided to the patient.
2. They result in a manageable number of diagnostic categories.
3. They can be easily created using most of the major diagnostic coding conventions.

They add that the use of DRGs has allowed hospital management to distinguish between increased costs associated with a more complex case mix, increased costs for treating the same cost mix, and that some third party payors have accepted DRG comparisons as the basis for obtaining case mix reimbursement exceptions.

Among cited disadvantages of the DRG system related to methodology, the authors note the following:

1. DRGs rely upon data on discharge abstracts which often include classification and coding errors, fail to include all diagnoses and procedures, and vary by the documentation of the attending physician and the conventions of the individual coder.
2. The present DRGs reflect the state of medical technology and practice at the time of their development. To account for advances in diagnostic procedures and therapeutic modalities, the DRGs would have to be reformulated.
3. The performance of a surgical procedure often categorizes a patient into a more complex DRG. If DRGs are used for reimbursement and if the reimbursement method reflects the complexity of the DRG, surgical procedures may be encouraged because they result in higher reimbursement.
4. To create, evaluate, or redefine the DRGs, an extremely large data base is required. In addition, if hospital cost or charge data is used as the dependent, that is, resource consumption, variable, the data base is doubled because a discharge abstract and a hospital bill are required for each patient.
5. DRGs group patients into categories asserted to be homogenous on the basis of the historical consumption of patient Thus, DRGs are neither a standard of what should be done nor a measure of impact of the pattern of care upon the patient.

The authors also list other problems related to reimbursement or internal management applications of this approach mentioned by some who have used DRGs. These are:

1. While the DRG developers have asserted that the terminal DRGs group together patients who use similar amounts of resources, some who have used DRGs argue that the length of stay is not an appropriate measure of resource consumption. An Illinois research project using DRGs has found there is no consumption relationship between the length of stay and the use of either routine or ancillary services.
2. The DRGs are not statistically meaningful when applied to populations other than that on which they were originally derived. In an analysis of 690,000 patient records in Western Pennsylvania, the statistical method used by Yale researchers to produce the 383 DRGs from Connecticut and New Jersey data did not produce identical terminal DRGs.
3. Patient age needs to be given greater emphasis in formulating diagnostic groups. In one major Maryland teaching hospital, Medicare patients generally consumed 15 percent more resources than non-Medicare patients for the same DRG. In New York, one teaching hospital found its over-65 patients stayed approximately 50 percent longer than its under-65 patients in the same DRG. The director of the New Jersey reimbursement experiment has directed that approximately 50 of the 383 DRGs be re-evaluated to establish age-related DRGs.
4. The patient's socioeconomic status should be included in the formulation of diagnostic groups.
5. The type of patient admission (i.e., emergency, urgent, elective) should be considered in the formulation of the diagnostic groups.
6. DRGs are not medically meaningful because they group together unrelated patients. For example, DRG 39 groups together all patients whose principle diagnosis is cancer of the bone, thyroid, connective tissue, and nerves, and who did not receive a surgical procedure.
7. DRGs are not medically meaningful because they fail to subdivide some broad diagnostic groups. For example, DRG 121 includes all patients whose principle diagnosis is acute myocardial infarction.

8. DRGs are not medically meaningful because they fail to recognize the standby capacity need for high risk patients. For example, if a high risk pregnancy results in a normal delivery, the patient is classified as a normal delivery with no recognition of the use of laboratory tests needed to monitor the patient of the fetus to prevent complications.
9. DRGs are not medically meaningful because they fail to differentiate patients in different stages of the same illness. For example, the DRGs group together in a single category lung cancer patients with a short diagnostic workup, a lengthly chemotherapy treatment, or a terminal admission.
10. DRGs with large numbers of cases are for relatively routine patient services, such as, hernia repairs, tonsillectomy and adenoids, for which physicians have highly similar practice patterns; while the DRGs with substantial differences in physician practice patterns often have less than five cases in a given year and it is difficult to make comparative or evaluative judgment with such small numbers. Therefore, it is largely statistical information that locks in the status quo, thus preventing increased efficiency as well as appropriate medical improvements.

We believe that the DRG approach has potential for improving institutional management. However, a great deal more research and demonstration applications of different case mix measures are needed before the concept should become the basis for reimbursement of hospitals.

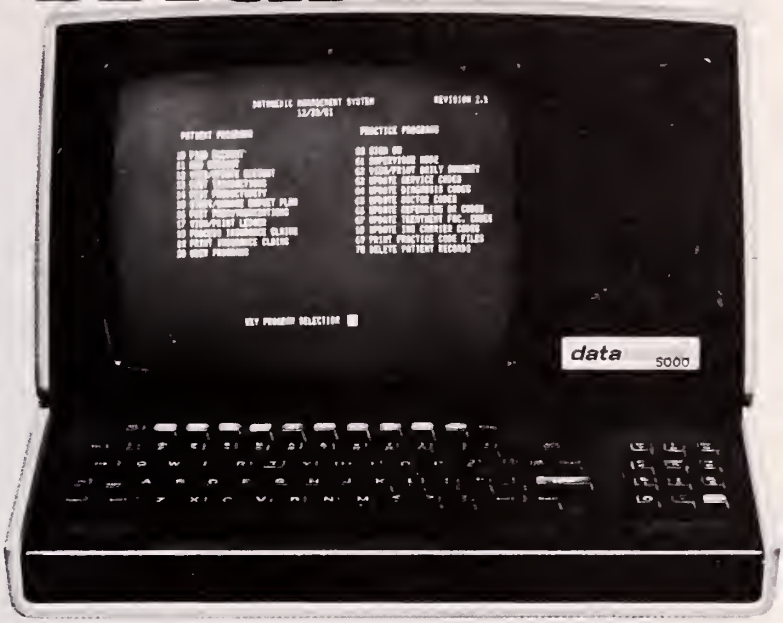
Conclusion — In conclusion, I would suggest that while prospective payment systems could be tailored to achieve cost savings, the question of side effects must be carefully considered. I quote from the 1982 General Accounting Office Report:

> "There is a point when a reduction in reimbursement could adversely affect access to and/or quality of care for beneficiaries. Also, if the prospective reimbursement does not apply to all payors, a facility can have an incentive to shift cost to non-covered payors."

Mr Chairman, this Task Force is in a good position to help develop a long-range health policy for our state. The Florida Medical Association recognizes this and wants to participate with you. We know that in your two-year study you will review and analyze objectively issues spelled out to you by the Legislature. You will be ever mindful of the need of our fellow Floridians and the needs of the hundreds of thousands of other Americans who visit our towns and cities. The FMA hopes the Task Force will seriously consider my comments in evaluating the effectiveness of prospective reimbursement and would also like to offer the FMA's assistance to the Task Force in achieving the goals and objectives as set forth by the Legislature.

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NOTES & NEWS

George D. Lundberg, M.D. addresses consulting editors



Dr. Lundberg

George D. Lundberg, M.D., Vice President for Scientific Information and Editor, *The Journal of the American Medical Association*, addressed the annual meeting of the Committee on Scientific Publications and Consulting Editors in Tampa on March 5, 1983. Dr. Lundberg, an author of over 150 articles and 10 books, spoke on the role and future of state medical journals. He characterized *The Journal of the Florida Medical Association* as one of the best in the nation and his assessment was subsequently confirmed by the receipt of first place recognition in the state medical journal category of the Sandoz Pharmaceutical Journalism Award.

Dr. and Mrs. Nathan Rubin receive honorary degrees

Dr. and Mrs. Nathan Rubin of Pensacola both received the honorary doctorate of humane letters granted by the University of West Florida April 30th during the commencement excerises. The degrees were conferred by Dr. James Robinson, President of the University of West Florida. This is the first time in the history of UWF that a husband and wife team has been so honored.

Dr. Rubin has practiced ophthalmology in Pensacola since 1936 except for the time spent in the U.S. Army Corps during World War II. Dr. and Mrs. Rubin have contributed to the arts in Florida by initiating and supporting cultural programs in the Northwest Florida area. Dr. Rubin has served for seven years on the Fine Arts Council of Florida, having been appointed by Tom Adams, Secretary of State, and then being reappointed by Secretary of State, Richard Stone.

Dr. Rubin has written a general column for the Bulletin of the Escambia County Medical Society and has been given a special award by the Florida Medical Association in recognition of his journalistic work.

Legislators honor Dr. Schiebler for strong advocacy on behalf of children



Dr. Schiebler

Governor Bob Graham and state legislators paid tribute to Gerold Schiebler, M.D., Chairman of the Department of Pediatrics at the University of Florida College of Medicine, during a reception and dinner in Tallahassee April 14.

Rep. Sam Bell of Ormond Beach was master of ceremonies for the dinner which was attended by a large group of state officials, UF pediatric faculty, and members of the Schiebler family. Special guests included Dr. Schiebler's father, Alwin Robert Schiebler who flew in from Buchholz, Germany to attend the event.

In a special resolution passed by the House of Representatives earlier in the day, Dr. Schiebler was commended for "selflessly and with great devotion, dedicating his life, both personal and professional, to the betterment of infants, children and their families in Florida and the nation."

The resolution further noted that significant statewide programs, including Children's Medical Services, infant metabolic screening, scoliosis screening, infant hearing screening, regional perinatal intensive care centers, and others too numerous to mention, would not have come into being were it not for the compassionate, steadfast and effective advocacy of Dr. Schiebler.

USF Craniofacial Center recognized

The Board of Regents of the State University System has declared its official recognition of the Tampa Bay Craniofacial Center at the University of South Florida. This Tampa Bay center for craniofacial deformity was established in 1978 as a center for the care, diagnosis, and treatment of patients with severe facial deformities both congenital and acquired. The Center was affiliated with the Department of Communicology at the University of South Florida in 1981

and became a center in the Human Resources Institute at the University of South Florida in 1982.

The Center is directed by Dr. Mutaz B. Hubal, plastic surgeon. Dr. Jane Scheuerle, speech/language pathologist, Associate Professor of Communicology, is the co-director of the Center. The team also includes Dr. Jack Maniscalco, neurosurgeon; Dr. Marilyn Preston, pediatrician; Dr. Michael Abdoney, orthodontist; Dr. Antonio Castro, oral surgeon; and other medical and allied health specialists.

The team members focus their expertise on evaluating and diagnosing the patient's condition and on planning treatment strategies for all the patients who are seen at the Center with severe congential and acquired facial and craniofacial deformities. The Center is located off campus on 801 West Buffalo Avenue in Tampa which is in the proximity of the major medical centers in the area. Most of the patients receive their treatment at Tampa General Hospital.

Dr. Modell appointed to National Committee on Payment for Physician Services in Teaching Hospitals



Dr. Modell

Dr. Jerome Modell, professor and chairman of the Department of Anesthesiology at the University of Florida College of Medicine, has been appointed to a national committee of academic physicians that will study the potential impact of proposed regulations designating how physicians at teaching hospitals will be paid for the services they provide.

Dr. Modell becomes one of 13 members of the newly formed Committee on Payment for Physician Services in Teaching Hospitals composed of members of the Association of American Medical Colleges (AAMC). The 14-year University of Florida faculty member was named to the committee by AAMC president Dr. John A.D. Cooper.

Dr. Modell has held the office of president of the Association of University Anesthetists and of the Society of Academic Anesthesia Chairmen, and has served as chairman of the Governmental Affairs Committee of the American Society of Anesthesiologists. From 1979 to 1983, he was a member of the AAMC's Ad Hoc Committee on Medicare Section 227.

Dr. Cruz elected to office in Society of Perinatal Obstetricians



Dr. Cruz

Dr. Amelia C. Cruz, Associate Professor of Obstetrics and Gynecology at the University of Florida College of Medicine, is the newly elected secretary-treasurer of the Society of Perinatal Obstetricians.

The national organization of Board-certified specialists in maternal and fetal medicine elected Dr. Cruz and other new officers during their recent annual meeting in San Antonio.

Dr. Cruz is director of obstetrical care for the Regional Perinatal Intensive Care Center based at Shands Hospital — a referral center providing highly specialized medical services to high risk pregnant women. She also is director of the Division of Maternal and Fetal Medicine within the University of Florida College of Medicine's Department of Obstetrics and Gynecology.

A native of Manila, Philippines, Dr. Cruz was named a Diplomate of the American Board of Obstetrics and Gynecology in 1974 and a fellow of the American College of Obstetrics and Gynecology in 1975. She became Board certified in maternal and fetal medicine in 1977 and has contributed extensively to this subspecialty through numerous publications in scientific journals.

Dr. Sheppard named Director for International Gerontology Study Center based at USF

Dr. Harold Sheppard, former counselor on aging to President Jimmy Carter, has been named director of Florida's International Exchange Center on Gerontology, headquartered at the University of South Florida.

The Center, a consortium of 10 member universities, is funded by the Florida Legislature to aid and support governmental and public bodies dealing with the problems and interests of senior citizens. Its activities include the development, collection, analysis and circulation of information pertinent to the creation and regulation of public policies and programs affecting the elderly.

Member universities are Florida A&M, Tallahassee; Florida Atlantic University, Boca Raton; Florida International University, Miami; Florida State University, Tallahassee; University of Central Florida, Orlando; University of Florida, Gainesville;

University of Miami, Coral Gables; University of North Florida, Jacksonville; University of South Florida, Tampa; and the University of West Florida, Pensacola.

Dr. Sheppard replaces Dr. Wayne Vasey, a distinguished visiting professor in gerontology and social sciences at USF. Dr. Vasey had served as acting director for the Center since its establishment by the Legislature as a Type I funded institute in 1980. USF's Department of Gerontology is considered one of the leaders in this academic field.

Dr. Chandler & Dr. Alonso named to office in Pan American Association of Otolaryngology and Broncho-Esophagology

James R. Chandler, M.D., F.A.C.S., Professor and Chairman of the Department of Otolaryngology of the University of Miami School of Medicine was named President of the Pan American Association of Otolaryngology and Broncho-Esophagology. During the same Congress in San Juan, Puerto Rico, in November 1982, William A. Alonso, M.D., F.A.C.S., Associate Professor in Surgery, Division of Otolaryngology, University of South Florida College of Medicine, Tampa, was reappointed Treasurer. The Pan American Association of Otolaryngology and Broncho-Esophagology is an international organization that includes members from the entire Western hemisphere from Canada to Argentina.

Dr. Strasser killed while aiding injured motorists

Harold S. Strasser, M.D., Palm Beach, was killed February 10, 1983 while aiding two injured motorists. Dr. Strasser, an orthopedic surgeon, had stopped to give first aid to two men in an overturned van. While offering his assistance, another car struck the van and Dr. Strasser was pronounced dead at the scene. He is survived by his wife Linda, two daughers, Suzanne and Jacqueline, and a brother, Dr. Robert Strasser, all of Palm Beach.

Dr. Barness on best seller list

Nutrition and Medical Practice, AVI Publishing Company, authored by Lewis A. Barness, M.D., has been named to the company's list of 20 best sellers for 1982. Dr. Barness is Professor and Chairman, Department of Pediatrics, University of South Florida College of Medicine.

DEAN'S MESSAGE

Apathy — the next "crisis"?

Crisis is a word seen with increasing frequency in medical journals. The practice of medicine we are warned, is or appears to be seriously threatened. Examples are many and include most recently the "Professional Liability Crisis". Each crisis poses different and often unique problems to physicians in the practice of medicine and those of us in academic medicine.

In practice, the crisis issues require immediate attention. The impact is potentially immediate. At the academic level, the crisis requires different, though just as immediate attention, and the issue is usually presented as information to our students in the framework of the existing curriculum.

In order for practitioners of medicine to be informed and act rapidly, medicine has organized on a local, statewide and national level. The function of these organizations is well known to each of you. However, physician participation or lack thereof is a problem which has been highlighted at all levels. I believe there is a significant crisis developing — physician apathy. This is, however, not my own deduction but was recently put into focus at a Hillsborough County Medical Association meeting. The speaker was Spence Meighen, M.D., from Portland, Oregon, who presented a discussion entitled "The Promised Land." This excellent presentation warned that physicians were, for various reasons, not participating in the decisions being made around them which affected them so dearly. He predicted that without change in physician attitude and actions that, in the not so distant future, the practice of medicine as we know it will not exist. His message was clear.

Fortunately, I believe, there were in attendance 197 of our medical students from the University of South Florida College of Medicine. The students were quite stimulated and very interested by this presentation and the scenario raised by Dr. Meighen. The reason that the students were present is a result of our concern and that of the local medical community about involvement of students at an early point in their training. We have evolved a program where in alternate years, the HCMA invites the student body or housestaff as their guests to attend a regular monthly meeting. The students have responded very well and their enthusiasm is reflected by their excellent turnout.

In addition, the HCMA, the FMA and the AMA are providing the opportunity for student membership and participation in a fashion similar to that of active members. We have encouraged our students to become involved to the extent that they are able.

A recent visitor to our campus was Frank Jirka, M.D., President-Elect of the AMA. Many students were in attendance when he indicated the desire of the AMA for increased student participation. We will continue, as we must, to nurture this interest and enthusiasm on the part of our students. Hopefully, the result will be more involved physicians of the future.

But, for now, your participation is necessary and vital for the practice of medicine to continue as you want it. Better care is needed. Cost-containment is needed. Better distribution of services is needed. Changes are needed, but insist that the changes be instituted by those who will continue to deliver patient care, the practicing physicians, and not by those inexperienced in caring for ill people. As we attempt to provide insight and direction for our students, you must provide the example to be emulated. Your actions will determine the practice status of those who follow. Become involved! Let's not have physician apathy as the next crisis.

James A. Hallock, M.D.
Deputy Dean
University of South Florida
College of Medicine

CORRESPONDENCE

An open letter to physicians

As the practice of medicine has become more complex and specialized, the medical assistant has become the physician's most valuable allied health professional — and the American Association of Medical Assistants (AAMA) has become organized medicine's best ally. The professional development offered to its members by AAMA can make the difference between an amateur and a professional office staff.

Professional medical assistants are committed to self-development and lifelong learning. They are concerned not only with earning a living but also with serving patients.

Qualified medical assistants can perform many administrative, clinical, managerial and supervisory functions, freeing the physician to spend more time in direct physician contact. AAMA is dedicated to the education of this multi skilled professional.

AAMA recognizes that competence in the field requires medical assistants to communicate effectively, to adhere to ethical and legal standards of medical practice, respond to medical emergencies, and to demonstrate professional characteristics. In response to increased patient awareness and technological advances, medical assistants, through AAMA, have assumed more responsibility for patient care tasks and developed specialities within the field.

Medical assistants are the first and last health care professionals to see the patient in the office. They are in a unique position to reflect the philosophy of the office and set the tone for everything that happens there. The medical assistant's impact on a physician's success and efficiency may be even greater than he realizes, for it is the medical assistant who bridges what some have called the greatest communication gap in our society — that between the physician and his patient.

AAMA is attuned to the problems of modern medical practices. AAMA realizes practices that fail to treat today's patients with dignity and respect are in for a rude awakening.

Malpractice suits in all areas of health care are increasing. The majority of these suits arise from misunderstanding — real or imagined slights and neglects. A patient is less likely to file a suit against an office where he feels he has received professional, just and courteous treatment.

Writing in St. Paul Fire and Marine Insurance Company's *Malpractice Digest*, Neil Bernstein points out that, by the time the patient walks into the examination room, he has had the time and experience to form a prejudgment of the care he will receive. This prejudgment is related to such non-medical factors as the appearance and management efficiency of the office, and the level of knowledge and personal understanding displayed by staff members.

As agents of physicians, medical assistants should be thoroughly versed in medical law and ethics as they apply to the physician-patient and the medical assistant-patient relationship.

Toward that end, AAMA has recently prepared a fourth guided study program, *Law and Ethics for the Medical Office.* It describes legal and ethical responsibilities as they relate to the practice situation. It provides guidelines for defensive medical practice that can be assimilated by every health care professional working with the physician. While an understanding of the psychological and psychosocial needs of the patient was presented in AAMA's guided study program, *Human Relations for the Medical Office*, the law and ethics program emphasizes the cause-and-effect relationship of meeting patient needs. The course offers legal defense procedures on professional liability suits, confidentiality and release of medical records, and preparation of court documents.

Farsighted and prudent physicians quickly learn that encouraging their medical assistant's educational growth and professionalism is an inexpensive way of

promoting self-esteem, loyalty and efficiency. Recognizing the contributions of medical assitants to our practices by supporting their active participation in AAMA is a simple way to enhance their proficiency and help reduce malpractice claims. With increased competence, medical assistants enable physicians to enlarge the scope and quality of their services. When we encourage the personal growth and development of our medical assistants, we also encourage them to tap their own potential and become more effective members of the health care team.

Commitment to high standards in certification, accreditation and continuing education is the hallmark of AAMA's professionalism. The three educational arms of AAMA — Certifying, Continuing Education and Curriculum Review Boards — work constantly to help members increase their competence and the quality and scope of their service.

Besides the stimulation of peer interaction and prestige of belonging to a professional organization, AAMA offers organized educational activities, planned meetings, study groups, continuing educational programs and workshops to broaden members' knowledge.

AAMA was organized in 1956; its primary objective is professional self-improvement to enable each medical assistant to better serve the medical profession and the public. AAMA inspires its members to give honest, loyal and efficient service, to improve their educational background, and to better serve their employers. It is to the physician's advantage to encourage AAMA membership.

Physicians depend upon medical assistants to manage their offices competently and efficiently. AAMA's potential membership is estimated at 300,000-500,000 members, yet its current membership is less than 16,000. With AAMA as its representative, medical assisting as a whole could be the strongest and most important allied health profession to physicians.

According to its bylaws, AAMA is not, nor can it ever become, a union or collective bargaining agency. In addition, the association has been commended by the American Medical Association on six separate occasions.

For further information, I encourage you to contact your state medical society or write to the American Association of Medical Assistants, One East Wacker Drive, Suite 2110, Chicago, Illinois 60601. The investment of your time today can result in physicians, medical assistants and patients all benefiting as AAMA helps its members fulfill their professional obligations.

Ralph E. Hagan, M.D.
Vice Chairman
AAMA, Physician-Advisory Board
Richmond, VA

WORTH REPEATING

Why HMOs?

Now that an HMO is operational in Tallahassee, that is a question which may reasonably be asked. Especially may it be asked by those doctors who feel threatened by its presence. Having been exposed to HMO strongpoints and deficiences more than the average doctor, I will try to answer from my vantage point.

Before tackling the whys, I would like to present, as I perceive it, the whats. What are they and what are they not? To begin with, they are carrying a name which would make a Madison Avenue huckster proud: Health Maintenance Organization. What a gimmick. What a marketing tool. Who can object to an organization designed to maintain a person in good health? Of course, as doctors, we realize that there is only so much we can do to preserve health — immunizations and early treatment of potentially serious conditions while they are still minor. The truly significant possibilities for maintaining health lie in following healthy life styles and all we can do there is education for the ultimate responsibility lies with the individual. An organization can not do it for him or her.

If the name, then, is a marketing tool, what was it that was being marketed, and why? In this case, the product was a concept, that while not new, was not widely known, — prepayment of comprehensive medical care. The reason was that all consuming "bottom line", cost control. The name and the marketing campaign are credited to Dr. Paul Elwood, then an advisor to President Nixon's administration, and the culmination was the HMO Act of 1973 which formalized standards for HMOs and provided for Federal grants and loans to encourage people to plan and get them into operation. When the decorations are trimmed away, however, what we have is another method for financing medical care.

Today over 10 million people are receiving their medical care from about 250 HMOs. There are still more receiving care from pre-paid health plans that technically don't qualify, under terms of the Act, as HMOs. Planning experts project that by the end of this decade, 30-50 million people will belong to some such organization.

To be successful, HMOs must effectively reduce costs when compared to their competition, fee for service. There are a limited number of methods by which this can be accomplished and they are designed to put all medical decisions, recommendations, and treatments to the tests of appropriateness and necessity. Several principles are almost sine qua non.

1. The philosophy of a primary care doctor serving as gatekeeper for the system is paramount.

2. Insofar as practical, services must be provided "in-house".
3. No patient must be hospitalized if he can be treated in the ambulatory setting.
4. Specialty services must be secured by, in order of preference, salaried physician, contract physician (on time or specific service basis) or fee for service.

As can be seen, the objective is to remove any incentive for over-utilization. If these measures are successful, then additional benefits can be offered the members in the form of educational programs, counseling, periodic health appraisals, allied health services, and other such programs not requiring direct physician involvement.

Returning now to the original question, "Why HMOs", I believe that describing the whats has partially answered the question. The rest of the answer may be found in these facts. People are asking for it, maybe not by name, but a significant number are demanding that changes be made. Whether right or not, people want first dollar coverage and full coverage. Their employers, who are paying a sizeable part of the bill, are insisting that they can not pay more. Insurance companies are seeing their premiums pushed to a level that is making them non-competitive. Thus, they are experimenting with the prepayment concept as a possible survival tactic or at least a means to gain or maintain a share of the market. Finally, there is a corps of "health care managers" who have developed in response to these forces, and this is their business. All of these reasons account for the development of HMOs and assure that they will continue to develop.

I wish we would drop the name, HMO, and refer to them as Prepaid Medical Care Plans. I am sure that in coming years, every doctor in practice will be affected by them in one way or another. When we look at them objectively, the principles for their success, which I enumerated, really describe good medical practice if one pitfall is avoided. That pitfall is the temptation of inadequate care, and that can only be prevented by physician control of standards for quality assurance.

Many people will find this a desirable way to obtain medical care, but the majority, I am sure, will continue to receive their care in the traditional manner, finding HMO benefits outweighed by their drawbacks. Nonetheless, whether or not they are directly affected, all doctors because of the growth of prepaid programs, will have to become more concerned with accessibility, patient satisfaction, and cost effective practice.

James K. Conn, M.D.
Tallahassee

Reprinted from *The Captial Medical Society Newsletter*, November 1982.

Who's defending the good guys?

Many years ago, Florida enacted a "Good Samaritan Law" to protect its citizens. This law allowed passing doctors to stop at the scene of an accident and help the injured without fear of being sued for their efforts. The practice of suing these "Good Samaritans" had become so popular that doctors were afraid to offer help, and injured citizens that could have been saved were suffering and dying.

Florida today is in a worse and more widespread medical crisis. A drunk falls into a swimming pool. In efforts to save his life, he becomes paralyzed. Judgment against the physician and hospital offering help: ten million dollars. The next drunk may be left in the swimming pool. Neither doctors nor hospitals can afford ten million dollar suits.

The problem is not limited to the highway and the emergency room. An anaesthesiologist walking down a hospital corridor hears a "code blue" (cardiac arrest) over the loudspeaker. He is not responsible for the patient but he is close by. Should he rush to offer help, knowing he will almost certainly be sued if he fails, or should he walk on by? If he's wise, he'll walk on by. Fortunately for the citizens of Florida, most doctors to date have not been noted for this type of intelligence. Had they been, many less would have made themselves vulnerable to suit.

They are learning, however. The AMA and its local counterparts have been forced to sponsor workshops on Professional Liability (malpractice). Doctors attending these workshops are being taught "defensive medicine"; to look on every patient as a potential enemy likely to sue. The effect on the doctor-patient relationship this will produce cannot even be estimated as yet. National polls still show that the vast majority of patients trust their doctors. What will happen to patient care when doctors can no longer trust their patients?

Malpractice suits have gone from big business to a game show. Plaintiff's lawyers contend that huge judgments make medical personnel more concerned and careful, thereby improving medical care. If this were so, the passing years would show a decrease in malpractice suits rather than an ascending spiral. Larger awards engende more suits which, in turn, increase the cost of malpractice insurance to physicians. To pay the premiums, the physician must either raise his charges per service at a rate comparable to rising insurance costs, or see more patients per day, which must, of necessity, reduce the time spent with each, thereby reducing the quality of care.

The cost of medical care is already under fire. It is hard to convince a doctor of the value of ordering one less test when he could pay over $50,000 (this is the current premium in New York) in malpractice

insurance premiums before he starts a new year's practice, and he knows this money must be collected from his patients during the year.

Averaging of malpractice insurance costs among the various medical specialists does not give a picture of the impact this situation has on medical care. Florida has a high percentage of elderly citizens on fixed incomes. For these people, medical visits are more frequent and costs more important. Serious medical problems are also more prevalent and the care of highly trained specialists more critical. Mr. Johnson's regular care under his family physicians may have risen ten percent, which is already a strain. When he needs a neurosurgeon he sees a different picture. The neurosurgeon has seen a hugh malpractice insurance premium increase. Can Mr. Johnson afford his share of this escalation? With the promise of a comparable rise next year, can the neurosurgeon even afford to stay in practice in the area? Will the needed specialists be available locally after a few years?

Dr. P. is one of the best known and finest neurosurgeons in Dade County. He is now sixty-five. His abilities are unimpaired, and he doesn't really want to retire. On the other hand, his malpractice premium for the next year could be doubled. With his family grown, should he pay this to stay in practice, or retire and leave the county with one less experienced specialist? Perhaps he can be replaced by a new man, fresh from residency. With accumulated debts of ten or more years and a family to raise, can this man open practice by paying comparable fees plus expenses, knowing it will be higher next year?

Dr. G. is in his seventies. He is a former professor, highly respected and still active. However, he is over seventy. He care for a limited number of patients, most of them elderly. Few of them have large incomes. This year, his malpractice premium may be doubled or tripled. This may exceed his personal income. The fact that he is practicing only about three days a week makes no difference; the premium is the same. If he does not carry the insurance, he cannot hospitalize his patients and many need it. He will retire and his patients will seek new doctors at higher rates.

A hugh increase in all patients' charges will be inevitable without legislative action. Compare it to the fuel adjustment charge of Florida Power and Light. This represents costs paid by the company for fuel to operate their plants, not income. It has increased 1200% since 1970.

In 1975, the insurance companies in Florida, already charging well over $4,000 a year for basic coverage for a neurosurgeon, anesthesiologist or similar specialist, submitted a premium increase requirement of 286% to the State Insurance Commission. When this was denied, they withdrew from the state. Insurance for the next seven years was available only from local trusts, assessable when problems arise. The premiums rose every year, in spite of some legislative help in cost containment. Even this limited help was encouraging enough to induce some commerical insurance companies to explore the Florida market again. Last year, however, the legislation help was removed. Instantly, judgments soared to all-time record levels undoing overnight what benefits had been achieved over the seven years of legislative effort. The doctor in turn now has no choice but to pay the insurance premiums if he wishes access to hospital facilities.

An earlier option of abandoning his insurance is rapidly being eliminated by court decisions making hospitals liable for any judgments against a physician if the physician does not carry insurance. The hospitals themselves may be sued for financial irresponsibility for keeping uninsured physicians on their staffs. The insurance premiums, then, must be paid since the doctor cannot practice without the hospital's facilities. Can the public afford it? They will have to if they do not come up with an alternative. The doctor himself will not see any of these thousands of dollars. Regrettably, most of the public will blame the doctor's greed for the cost increase.

The physicians most affected by the cost increase will be the specialists, whose talents cannot be supplied by the general physician with lower malpractice premiums. These specialists are the courts of last resort when the generalist needs help. These are the men and women who will not be available in Florida. The patients can be transferred to New York, Chicago, Baltimore or Atlanta as they were thirty years ago, if they can survive the trip and cost. This will set the quality of medicine in Florida back the same thirty years.

Protests will be raised that control of the spiraling malpractice costs cannot be made within the law. Laws are written and interpreted for the benefit of the people. When the laws do not benefit the citizen, they need appropriate revision. This has been done in other states. It was done in Florida in the "Good Samaritan" laws.

The Federal Government sets limits on personal injury suits for military killed or injured in action. When uncontrolled awards to a few threaten the existence of a service the public needs, appropriate steps must be taken. If Florida wishes to keep good medicine available for its citizens, this must be done again. When the average citizen cannot obtain specialty medical care because the physician has been forced out of the market, or has stayed in the market with prohibitive charges, the citizen must protest and have legislative controls placed upon professional liability judgments.

Hueston C. King, M.D.
Venice

Reprinted from *Miami Medicine*, April 1982.

AMA Hospital Medical Staff Members:

Strengthen Your Role In Decision-Making... Influence AMA Policy!



As a Hospital Medical Staff Representative, you should plan now to attend this four-day AMA Hospital Medical Staff Section Assembly Meeting. You will have an opportunity to contribute to the decision-making process and participate in developing policy that will address the issues and concerns of physicians on hospital staffs.

The AMA Hospital Medical Staff Section will provide representatives from hospital medical staffs with a forum to discuss common problems and changes in Physician-Hospital Relations, and a direct voice in policies being considered by the American Medical Association.

Group sessions will be conducted on various topics of interest to hospital medical staff members. Potential issues for discussion include: medical staff representation, staff privileges, and overall relationships between physicians and hospitals.

Here's your opportunity to effect change. For information contact the AMA Department of Hospital Medical Staff Services at (312) 751-6476.

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BOOK REVIEWS

Book Review Editor — **F. Norman Vickers, M.D.**

Bypass

By Joseph Waxberg, M.D., 165 pages. Price $10.95. Appleton-Century-Crofts, New York.

This book was written by a psychiatrist who has undergone bypass surgery for ischemic heart disease. The story begins with the author's suspicion, recognition and denial of an impending heart attack. Cardiac catheterization and a review of the procedure on the video-screening machine with his surgeon *before* surgery enables a complete understanding of the procedure. Throughout the operation the author brings to the readers an experience "beyond the river" as only a psychiatrist can do. Intensive care is made visible by his description and questions full of understanding about preoperative anxiety to postsurgical depression. The author's background in psychiatry and in sex therapy allowed an uninhibited view of erotica. This was refreshing to a gynecologist (orientated in sex therapy) who is aware of the apparent lack of pre-operative information given to some patients (concerning their sexuality) and its importance to hysterectomy and mastectomy patients.

The book includes practical diet and exercise guidelines, discussion of those sexual problems that often affect heart patients, advice on coping with the fear of death, and realistic case studies based on Dr. Waxberg's experiences in counseling groups of bypass patients. Each year, nearly 200,000 Americans undergo coronary bypass surgery. The book is frank, sometimes humorous, and as well, informative. It will help you — and your family and friends — deal with the realities of heart disease and surgery, and to learn from the changes brought about by the crisis.

I would recommend this book for everyone, because someday you or a loved one will need it.

Lees M. Schadel Jr., M.D.
Ft. Lauderdale

- Dr. Schadel is in private practice of gynecology in Ft. Lauderdale. He is a long-time editor of *The Record*, Bulletin of the Broward County Medical Association. Dr. Schadel underwent a successful coronary bypass procedure several months ago.

A gift of courage

By Thomas S. Morse, M.D., 326 Pages. Price $16.95. Doubleday and Company, Inc, New York, 1982.

Thomas Morse, in his book *A Gift of Courage*, provides the reader a unique inside glimpse of the development of the specialty of Pediatric Surgery in this country. Dr. Morse provides these insights in the form of an autobiographical sketch of his own professional life in Pediatric Surgery. The author trained in the early days of organized Pediatric Surgery in America and practiced his specialty in Columbus, Ohio for many years thereafter. The era of his training and practice span an important time in Pediatric Surgery and a period of remarkable development of the specialty in this country. Dr. Morse illustrates important milestones in Pediatric Surgery by relating the stories of particularly memorable patients in each of these intervals. His descriptions are always heart warming and provide considerable insight into many of the agonies and rewards of a Pediatric Surgical practice. Physicians reading this book will recognize many of these important advances from their own careers and perhaps will be stimulated to remember many of their own patients and the lessons they provided. This book will be of special value to young people contemplating a career in surgery, whether or not they are particularly interested in Pediatric Surgery. The book will also have appeal to the lay public, with an interest in the medical profession and may prove suitable for selected patients or parents in our practices. It provides light and interesting reading and is strongly recommended.

Bradley M. Rodgers, M.D.
Charlottesville, Virginia

- Dr. Rodgers is Professor and Chief, Division of Pediatric Surgery at the University of Virginia Medical Center. He was formerly in the Division of Pediatric Surgery, University of Florida, Gainesville.

President's report—1982-83

The 1982-83 year has been an exciting, productive and very busy year for the Florida Medical Association Auxiliary. It is my pleasure to report on the following activities:

Florida was represented by its quota of eighteen delegates and two alternates at the Annual AMA-Auxiliary meeting in Chicago, June 13-16, 1982. Wearing the traditional orange blazers, Delegates served as hostesses at the reception for Dr. Rufus Broadaway who was elected to the AMA Board of Trustees. The convention schedule was hectic, but each of our Delegates met the challenge.

The new format of our magazine, "The Quarterly" has been well received by our members and has enhanced our image on the national level.

The 1982-83 Yearbook has been redesigned to conform to the AMA-Auxiliary notebook format. Hopefully, this will save money as the book will be passed on to new officers and chairmen with only the appropriate pages being reprinted.

The 1982 Fall Conference was held in Jacksonville, September 29-October 1. This was patterned after the AMA-Auxiliary Confluence. We were honored to have Dr. Robert Windom, President, FMA, as our banquet speaker. Mrs. John G. Bates, AMA-Auxiliary President-Elect, hosted a workshop on membership. We are indeed grateful to Dr. Byron Thames and Dr. James White for their assistance with the program. A forum on learning disabilities was chaired by Mrs. James G. Jude. Participants were: Frank Carrera III, M.D., Child Psychiatrist; Louis Jerome Poetter, A.B.M.A., Psychology; James G. Nealis, M.D., Pediatric Neurologist; and Richard G. Skinner Jr., M.D., Pediatrician. Attending this conference were 150 leaders from counties all over Florida.

Our cookbook, "Rx for Fine Dining" made its debut at the Fall Conference. As of April 11, we have sold 3,912 cookbooks. Proceeds from the sale of the first printing are earmarked for the International Health Project.

Membership — Our Membership Committee has used the team approach again in 1982-83. The First Vice President, District Vice Presidents, State Treasurer, Members-At-Large Chairman, Resident Student Physician Chairman, and their county and branch counterparts have made a cooperative and concerted effort to increase our membership. At this time, we have in excess of 5,300 national members and 5,500 state members. Dues are still coming in, and it appears we will be adding another national Delegate. Congratulations to each of the membership team!!

Contributions — Our fund raising efforts produced to date approximately $100,000 for AMA-ERF, and $4,500 for FMF designated for the Impaired Physicians Program, and $4,329 for International Health activities. Thank you for your generosity.

National Visitors — Florida was indeed fortunate to have the following visitors from the AMA-Auxiliary:

May 5-9	**FMA-A Annual Meeting:** Mrs. Torrence P. B. Payne, President-Elect, AMA-A, and Mrs. Hazel Lewis, Executive Director, AMA-A.
Sept. 29 - Oct. 1	**Fall Conference:** Mrs. John G. Bates, President-Elect, AMA-A.
Nov. 20	**Palm Beach County Medical Society Auxiliary Meeting:** Mrs. Wayne C. Brady, Treasurer, AMA-A.
Dec. 7	**Dade County Medical Association Auxiliary Meeting:** Mrs. Torrence P.B. Payne; Mrs. John G. Bates, and Mrs. Hazel Lewis.
Dec. 15	**Orange County Medical Society Auxiliary Meeting:** Mrs. Torrence P.B. Payne.
May 4-8	**FMA-A Annual Meeting:** Mrs. Mylie E. Durham, Jr., Southern Regional Vice President, AMA-A.

Legislation — The Day At The Capitol was held April 5-7, 1983. Fifty Auxilians from around the state met in Tallahassee to hear about the important issues coming before the legislature, to meet their legislators, and to learn how to assist in the passage of legislation sponsored by the Florida Medical Association.

Legislative Alert — A system is now in place in which 400 Auxilians are involved in assisting with passage of major legislation supported by FMA.

The Special Auxiliary Issue of *The Journal of the Florida Medical Association* featured learning disabilities instead of Auxiliary activities as in the past. Mrs. James Jude and Dr. Sylvia Richardson, Professor of Communicology at the University of South Florida College of Medicine, have combined their efforts to produce this issue which features articles from medical and educational experts recognized nationwide for their efforts in the field of learning disabilities.

Meetings — One of my favorite presidential duties has been to visit most of the county medical auxiliaries — 22 in all.

I also had the pleasure of representing the Auxiliary at the FMA Board of Governors meetings; the national Auxiliary meetings as well as all the state auxiliary committee meetings held this year.

My sincere thanks to all Officers, Chairmen and other Auxilians who have assisted me. It has been an honor to serve as your President. Thank you for your kindness and friendship.

Mrs. Daniel B. Nunn
FMA-A President

Deaths

ADEL, FRANK EDWARD, Lake City; born 1929; University of Tennessee, 1957; member AMA; died 9/30/82.

ALVARE, MANUEL ANTONIO, Tampa; born 1912; University of Havana, 1942; died 5/27/82.

ANDREWS, FREDERICK CHARLES, Mount Dora; born 1925; Tufts Medical School, 1953; member AMA; died 9/28/82.

ASHWORTH, JAMES HENRY, Ft. Lauderdale; born 1946; West Virginia University, 1971; died 8/31/82.

BAGGS, WADE HAMPTON, JR., Tampa; born 1921; Emory, 1944; member AMA; died 12/19/82.

BARNETT, ERNEST R., Miami; born 1912; University of Maryland, 1937; AMA member; died 1/9/83.

BEACH, WILLIAM CULBERTSON, St. Petersburg; born 1919; Vanderbilt University, 1943; member AMA; died 12/19/82.

BELOTT, AUGUST VINCENT, Tampa; born 1906; University of Buffalo, 1931; member AMA; died 9/19/82.

BITZER, EMORY WEST, JR., Ocala; born 1929; University of Virginia, 1955; member AMA; died 9/23/82.

BOUGHTON, HERMAN, Miami; born 1900; University of Virginia, 1925; member AMA; died 3/30/82.

BRADY, PAUL E., St. Petersburg; born 1913; Medical College of Virginia, 1943; member AMA; died 8/18/82.

CABRERA, LUIS A., Miami; born 1921; Havana University, 1946; died unknown.

CIMINO, LOUIS EUGENE, Tampa; born 1926; St. Louis University, 1950; member AMA; died 10/28/82.

CLEVELAND, JACK QUILLIAN, Coral Gables; born 1907; Emory University, 1931; member AMA; died 12/27/82.

COLSKY, JACOB, Miami; born 1921; University of Tennessee, 1944; member AMA; died 5/19/82.

CONLY, PATRICK EDWARD, Miami; born 1933; New York Medical College, 1960; died unknown.

COUGHLIN, PAUL JOHN, Tallahassee; born 1916; Tufts Medical School, 1941; member AMA; died 8/5/82.

CROWELL, DAVID LLOYD, Miami; born 1918; University of Pennsylvania, 1943; member AMA; died 3/13/82.

DARTY, WARREN G., Winter Park; born 1921; Tulane Medical School, 1951; member AMA; died 12/12/82.

DAVIS, ROBERT JAY, Tampa; born 1915; John Hopkins, 1940; member AMA; died 6/82.

DOBRIN, MAX, Miami Beach; born 1892; Columbia University, member AMA; died 12/15/81.

DOWD, JAMES FRANCIS, Fort Myers; born 1913; St. Louis University, 1937; died 12/21/82.

EBERSON, FREDERICK, St. Petersburgh; born 1892; University of Minnesota, 1924; member AMA; died unknown.

ENGELBAUGH, HAROLD EDWARD, Melbourne; born 1931; Marquette University, 1959; member AMA; died 7/2/82.

FAJARDO, ORLANDO, Tampa; born 1919; University of Havana, 1950; died 10/29/82.

FERRANTE, GAETANO C., Tampa; born 1908; Loyola University, 1933; member AMA; died 6/30/82.

FIEBER, MACK HENRY, Miami; born 1914; University of Louisville, 1940; died 11/82.

FORTNER, DONALD E., Miami; born 1917; Hahnemann Medical College, 1944; member AMA; died 11/3/82.

LORENZO, GARI, Miami; born 1918; Havana University, 1947; died 8/14/82.

GARLAND, JOHN COURIER, Fort Myers; born 1901; University of Illinois, 1932; member AMA; died 10/24/82.

GRAHAM, THOMAS F., Bradenton; born 1920; Jefferson Medical College, 1945; died 12/26/82.

HALPERN, ARTHUR ELLIOT, Miami; born 1931; New York State Medical University, 1954; member AMA; died 4/25/82.

HANANO, ABDULLAH AKIL, Charlotte Harbor; born 1944; University of Damascus, 1962; died 11/26/82.

HOOD, BOBBY JOE, Clearwater; born 1925; Tulane University, 1958; member AMA; died 5/16/82.

JONES, H. QUILLIAN, SR., Fort Myers; born 1899; Emory University, 1922; member AMA; died 12/12/82.

KAUFMAN, JACK J., Miami; born 1900; Emory University, 1926; member AMA; died 6/6/82.

KUSHNER, ALEXANDER, Miami; born 1910; St. Andrews University, 1934; member AMA; died 9/82.

LARKUM, NEWTON WHEELER, Fort Myers; born 1897; University of Virginia, 1941; member AMA; died 11/14/82.

LIECHTY, JOHN DEMERATH, Ft. Lauderdale; born 1919; Northwestern University, 1957; member AMA; died 7/24/82.

LUNDQUIST, JOHN R., Pensacola; born 1921; University of Buffalo, 1946; member AMA; died 1/6/83.

MAXWELL, EUGENE BLAKE, Tampa; born 1898; University of Nebraska, 1926; member AMA; died 12/13/82.

MC COURT, JEROME PATRICK, Fort Myers; born 1947; Pittsburgh University, 1973; member AMA; died 11/4/82.

MC KENZIE, EMORY NORTON, Miami; born 1901; Emory University, 1924; member AMA; died 12/19/82.

MILLER, JAMES EDWARD, Charlotte Harbor; born 1917; Temple Medical School, 1943; died 12/3/82.

MITRANI, MOISES, Miami; born 1908; Havana University, 1934; died 5/20/82.

MUNROE, COLIN A., Hollywood; born 1915; Duke University, 1939; member AMA; died 7/20/82.

NAYFIELD, CHESTER LEONARD, inverness; born 1913; Middlesex Medical School, 1940; died 7/21/82.

NOVELL, SAMUEL, Miami; born 1902; George Washington University, 1927; member AMA; died unknown.

NUZUM, RUSSELL K., Miami; born 1910; Temple University, 1934; member AMA; died 7/26/82.

PEREZ, ANRES ROLANDO, Miami; born 1911; University of Havana, 1945; died 10/82.

ROBERSON, JOHN WILLIAM, West Palm Beach; born 1933; Hahnemann, 1959; died 5/30/82.

RUBIN, LEO JACK, Ft. Lauderdale; born 1914; Baylor, 1938; died 5/28/82.

SAAVEDRA, TULIO E., Sarasota; born 1932; University Hospital of Columbia, 1960; died 10/82.

SOLAR, ANGEL OJEDA, St. Petersburg; born 1915; University of Havana, 1943; died 12/31/82.

TODD, JAMES WALLACE, Eustis, born 1915; Emory University, 1937; member AMA; died 3/3/83.

TROPE, ROBERT JAY, Miami; born 1926; University of Louisville, 1947; member AMA; died 3/6/82.

TROUTMAN, ERWIN W., Miami; born 1895; Ohio State, 1920; member AMA; died 8/5/82.

WAHLE, JOHN PHILIP, JR., Ocala; born 1931; Emory University, 1957; member AMA; died 8/3/82.

WALTERS, WILLIAM H., Inverness; born 1905; Tulane University, 1932; member AMA; died 8/19/82.

WELLS, J. RALSTON, Daytona Beach; born 1889; University of Pennsylvania, 1912; member AMA; died 12/31/82.

WILLIS, HILLARD WOOD, Miami; born 1905; University of Louisville, 1930; member AMA; died 12/31/81.

WINTER, ALAN SEYMOUR, Miami; born 1940; Chicago Medical School, 1966; member AMA; died 5/19/82.

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DOCTORS OFFICE COMPUTER SYSTEMS



DOCS WORKS FOR YOU, YOUR STAFF, YOUR PATIENTS.

DOCS is a computer system that has been designed to meet the needs of Medical and Dental professionals. Installing a computer programmed with DOCS means that your practice runs more economically. Fewer mistakes are made. You and your staff waste less time on tedious paper work. The result? Increased return on receivables, improved practice information, fewer delinquent accounts. And that's just the beginning.

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- ☐ Labels
- ☐ Collection Letters
- ☐ Alphabetical Computer Look-Up
- ☐ Practice Analysis
- ☐ Cycle Billing
- ☐ Audit Trails
- ☐ General Ledger
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Meetings

Accepted by the FMA Committee on Continuing Medical Education for Mandatory Credit

JUNE

Clinical Treatment for Poisonous Snake Bites/From Quality Assurance to Quality Control, June 2, Town & Country Hospital Cafeteria, Tampa. For information: Stephen Lewis, M.D., Chief of Staff, 6001 Webb Road, Tampa 33615, (813) 884-7971.

Physicians' Continuing Education Seminar Series, June 7, Duval County Medical Society Building, Jacksonville. For info.: William P. Booras, M.D., Duval County Medical Society, 515 Lomax St., Jacksonville 32204, (904) 355-6561.

Medico Surgical Concepts in Chest Disease, June 12, Hyatt Regency Hotel, Tampa. For info.: Americo Gonzalvo, M.D., 5415 West Laurel Blvd., Tampa 33607, (813) 879-3400.

Female Menopause: Moan or Hormone, June 13, Good Samaritan Hospital, West Palm Beach. For information: John C. Whelton, M.D., Post Office Box 3166, W. Palm Beach 33042, (305) 655-5111 - Hospital, (305) 684-2030 - Office.

Conference in General Medicine and Family Practice Management of Stress, June 14, South Shore Hospital, Miami. For info.: Lynn Carmichael, M.D., (305) 547-6604.

34th Annual Scientific Assembly, June 15-19, The Breakers Hotel, Palm Beach. For information: Lee A. Fischer, M.D., (305) 968-7600.

Endoscopic Laser Therapy, June 18 & 19, Palms of Pasedena Hospital, St. Petersburg. For information: Peter Pardoll, M.D., 1609 Pasendena Ave., South., St. Petersburg 33707, (813) 384-6606.

Boderline Personality, June 23, Lake Hospital - main dayroom, Lake Worth. For information: Jesse Kaye, M.D., Lake Hospital, 1710 4th Avenue N., (305) 588-7341.

Arrhythmias and Cardiac Ischemia: Diagnosis and Management, June 24-26, Orlando Hyatt, Orlando. For information: Howard Bronson, M.D., International Medical Education Corporation, 64 Inverness Drive, E., Englewood, CO 80112, (303) 333-1577.

JULY

1983 Clinical Conference on Pre-hospital Emergency Care, May 8-10, Hyatt Orlando. For information: 1983 CliniCon Registration, 600 Courtland Street, Suite 420, Orlando 32804, (305) 628-4800.

ECG Interpretation and Arrhythmia Management, July 22-24, Orlando Hyatt, Orlando. For information: H. Bronson, M.D., International Medical Education Corporation, 64 Inverness Drive East, Englewood CO 80112 (303) 333-1577.

Advanced Cardiac Life Support, July 23-24, University of South Florida and Bayfront Medical Center, Tampa. For information: Charles Acremann, M.D., University of South Florida College of Medicine, Dept. of Family Practice, Tampa, (813) 823-1234.

Tenth Annual Review Course for Certification in IM "Fundamental and Clincial Aspects of Internal Medicine, July 31 - August 13, Sheraton Bal Harbour Hotel, Miami Beach. For information: Jose S. Bocles, M.D., (305) 547-6063.

AUGUST

Ambulatory Electrocardiography: Clinical Applications, Methodology and Interpretation, August 26-28, Orlando Hyatt, Orlando. For information: Howard Bronson, M.D., International Medical Education Corporation, 64 Inverness Drive, E., Englewood, CO 80112, (303) 333-1577.

References

1. Stone PH, Turi ZG, Muller JE. Efficacy of nifedipine therapy for refractory angina pectoris. *Am Heart J* 104:672-681, September 1982
2. Antman E, Muller J, Goldberg S, et al. Nifedipine therapy for coronary-artery spasm: Experience in 127 patients. *N Engl J Med* 302:1269-1273, June 5, 1980

BRIEF SUMMARY

PROCARDIA® (nifedipine) **CAPSULES** For Oral Use

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina), PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and or increased fluid volume requirements have been reported in patients receiving PROCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out. In PROCARDIA treated patients where surgery using high dose fentanyl anesthesia is contemplated, the physician should be aware of these potential problems and if the patient's condition permits, sufficient time (at least 36 hours) should be allowed for PROCARDIA to be washed out of the body prior to surgery.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure: Rarely, patients usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: General Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug Interactions: Beta-adrenergic blocking agents (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PROCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers. The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients; transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication. Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature.

HOW SUPPLIED: Each orange, soft gelatin PROCARDIA CAPSULE contains 10 mg of nifedipine. PROCARDIA CAPSULES are supplied in bottles of 100 (NDC 0069-2600-66), 300 (NDC 0069-2600-72), and unit dose (10x10) (NDC 0069-2600-41). The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

More detailed professional information available on request

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Pfizer LABORATORIES DIVISION
PFIZER INC

"I can do things that I couldn't do for 3 yrs. including joining the human race again."



Quotes from an unsolicited letter received by Pfizer from an angina patient.
While this patient's experience is representative of many unsolicited comments received, not all patients will respond to Procardia nor will they all respond to the same degree.

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"My daily routine consisted of sitting in my chair trying to stay alive."

"My doctor switched me to PROCARDIA[*] *as soon as it became available. The change in my condition is remarkable."*

"I shop, cook and can plant flowers again."

"I have been able to do volunteer work...and feel needed and useful once again."

PROCARDIA can mean the return to a more normal life for your patients—having fewer anginal attacks,[1] taking fewer nitroglycerin tablets,[2] doing more, and being more productive once again.

Side effects are usually mild (most frequently reported are dizziness or lightheadedness, peripheral edema, nausea, weakness, headache and flushing, each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%).



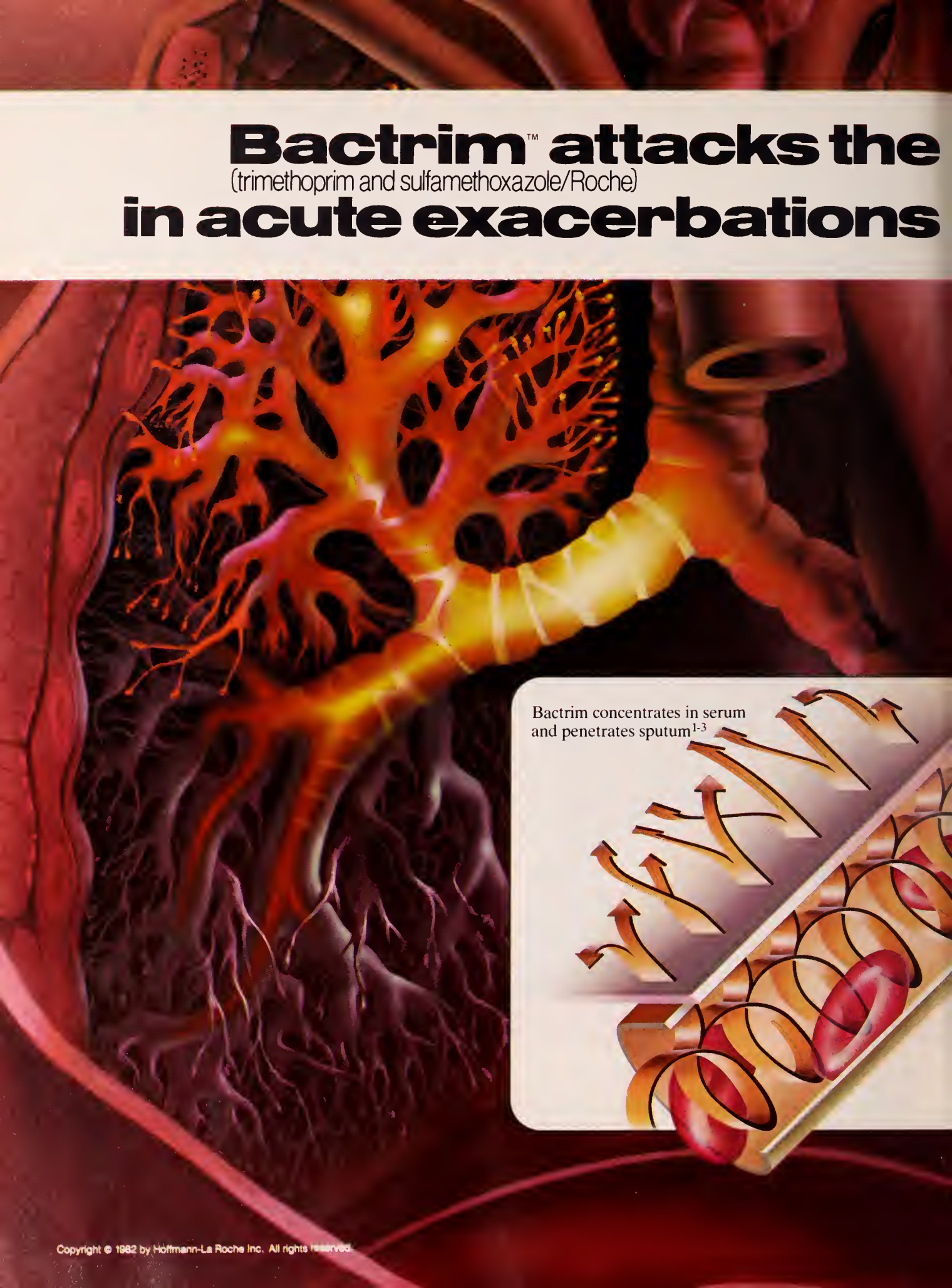
for the varied faces of angina

PROCARDIA®
(NIFEDIPINE) *Capsules 10 mg*

* Procardia is indicated for the management of:
1) Confirmed vasospastic angina.
2) Angina where the clinical presentation suggests a possible vasospastic component.
3) Chronic stable angina without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or nitrates or who cannot tolerate these agents. In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks' duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in these patients are incomplete.

Please see PROCARDIA *brief summary on adjoining page.*

Bactrim™ attacks the
(trimethoprim and sulfamethoxazole/Roche)
in acute exacerbations



Bactrim concentrates in serum and penetrates sputum[1-3]

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ROCHE

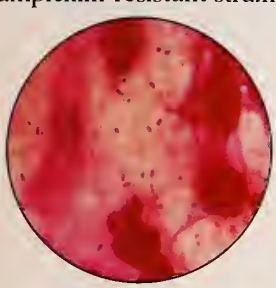
major pathogens of chronic bronchitis*

Bactrim clears sputum of susceptible bacteria

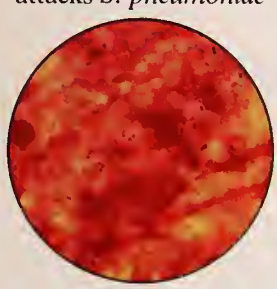
In sputum cultures from patients with acute exacerbations of chronic bronchitis, *H. influenzae* and *S. pneumoniae* are isolated more often than any other pathogens.[4,5] One study of transtracheal aspirates from 76 patients with acute exacerbations found that 80% of the isolates were of these two pathogens.[5]

Bactrim is effective *in vitro* against most strains of both *S. pneumoniae* and *H. influenzae*—even ampicillin-resistant strains. And in acute exacerbations of chronic bronchitis involving these two pathogens, sputum cultures taken seven days after a two-week course of therapy showed that Bactrim eradicated these bacteria in 91% (50 of 55) of the patients treated.[6]

attacks *H. influenzae*—even ampicillin-resistant strains



attacks *S. pneumoniae*



Bactrim reduces coughing and sputum production

In three double-blind comparisons with ampicillin *q.i.d.*, Bactrim DS proved equally effective on all clinical parameters.[7-9] Bactrim reduced the frequency and severity of coughing, reduced the amount of sputum produced and cleared the sputum of purulence.

Bactrim has the added advantages of *b.i.d.* dosage convenience and a lower incidence of diarrhea than with ampicillin, and it is useful in patients allergic to penicillins.

Bactrim also proved more effective than tetracyclines in 10 clinical trials involving nearly 700 patients.[10] Overall clinical condition of the patients, changes in sputum purulence, reduction in sputum volume and microbiological clearance of pathogens—all improved more with Bactrim therapy than with tetracyclines. G.I. side effects occurred in only 7% of patients treated with Bactrim compared with 12% of tetracycline-treated patients. (See Adverse Reactions in summary of product information on next page.)

Bactrim is contraindicated in pregnancy at term and nursing mothers, infants under two months of age, documented megaloblastic anemia due to folate deficiency and hypersensitivity.

Bactrim DS. For acute exacerbations of chronic bronchitis in adults* when it offers an advantage over single-agent antibacterials.

References: 1. Hughes DTD, Bye A, Hodder P: *Adv Antimicrob Antineoplastic Chemother 1*/2:1105-1106, 1971. **2.** Jordan GW *et al: Can Med Assoc J 112*:91S-95S, Jun 14, 1975. **3.** Beck H, Pechere JC: *Prog Antimicrob Anticancer Chemother 1*:663-667, 1969. **4.** Quintiliani R: Microbiological and therapeutic considerations in exacerbations of chronic bronchitis, in *Chronic Bronchitis and Its Acute Exacerbations: Current Diagnostic and Therapeutic Concepts;* Princeton Junction, NJ, Communications Media for Education, Inc., 1980, pp. 9-12. **5.** Schreiner A *et al: Infection 6*(2):54-56, 1978. **6.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **7.** Chodosh S: Treatment of acute exacerbations of chronic bronchitis: results of a double-blind crossover clinical trial, in *Chronic Bronchitis and Its Acute Exacerbations: Current Diagnostic and Therapeutic Concepts. Op. cit.*, pp. 15-16. **8.** Chervinsky P: Double-blind clinical comparisons between trimethoprim-sulfamethoxazole (Bactrim™) and ampicillin in the treatment of bronchitic exacerbations. *Ibid.*, pp. 17-18. **9.** Dulfano MJ: Trimethoprim-sulfamethoxazole vs. ampicillin in the treatment of exacerbations of chronic bronchitis. *Ibid.*, pp. 19-20. **10.** Medici TC: Trimethoprim-sulfamethoxazole (Bactrim™) in treating acute exacerbations of chronic bronchitis: summary of European clinical experience. *Ibid.*, pp. 13-14.

Economical b.i.d.

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole/Roche)

*Due to susceptible organisms. **Please see next page for summary of product information.**

Bactrim™

(trimethoprim and sulfamethoxazole/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note.* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects. Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

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Children. Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

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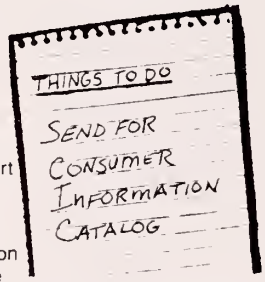
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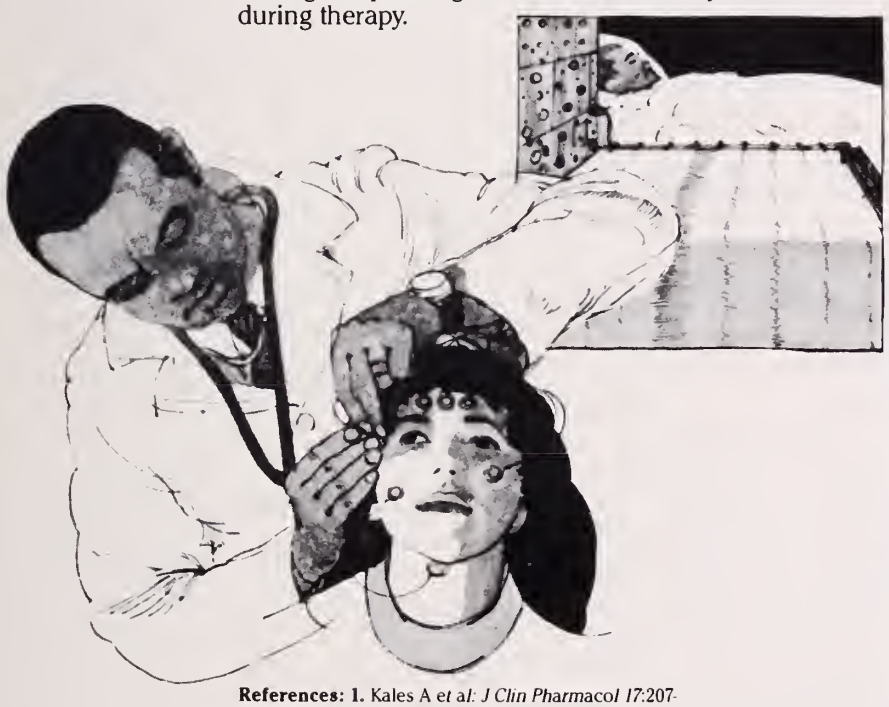
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References: **1.** Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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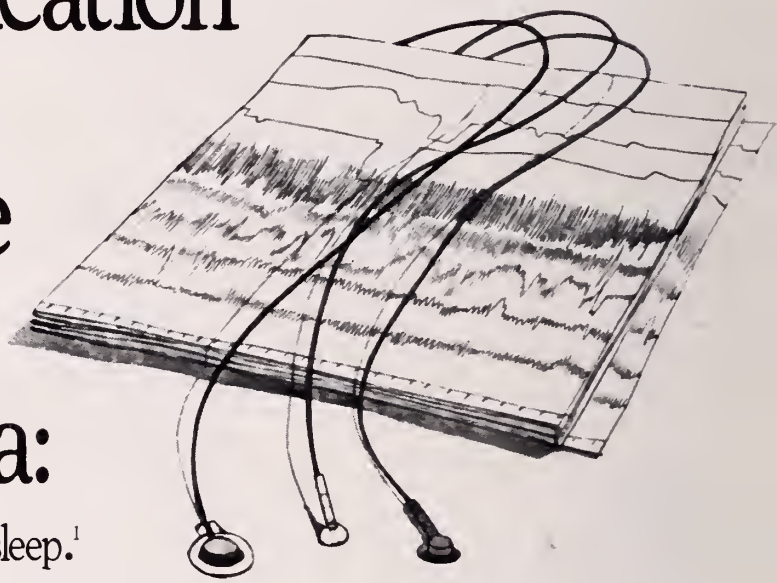
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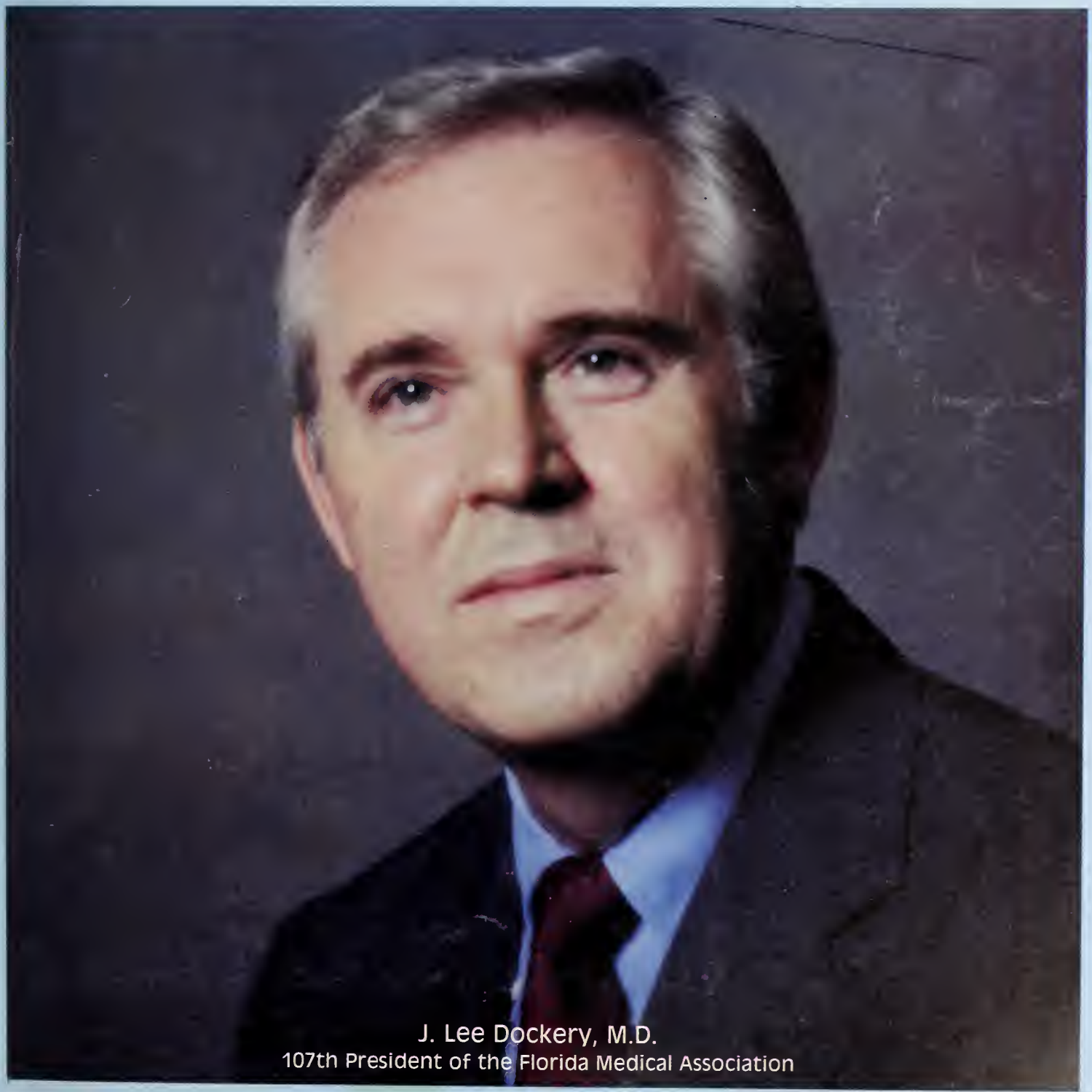
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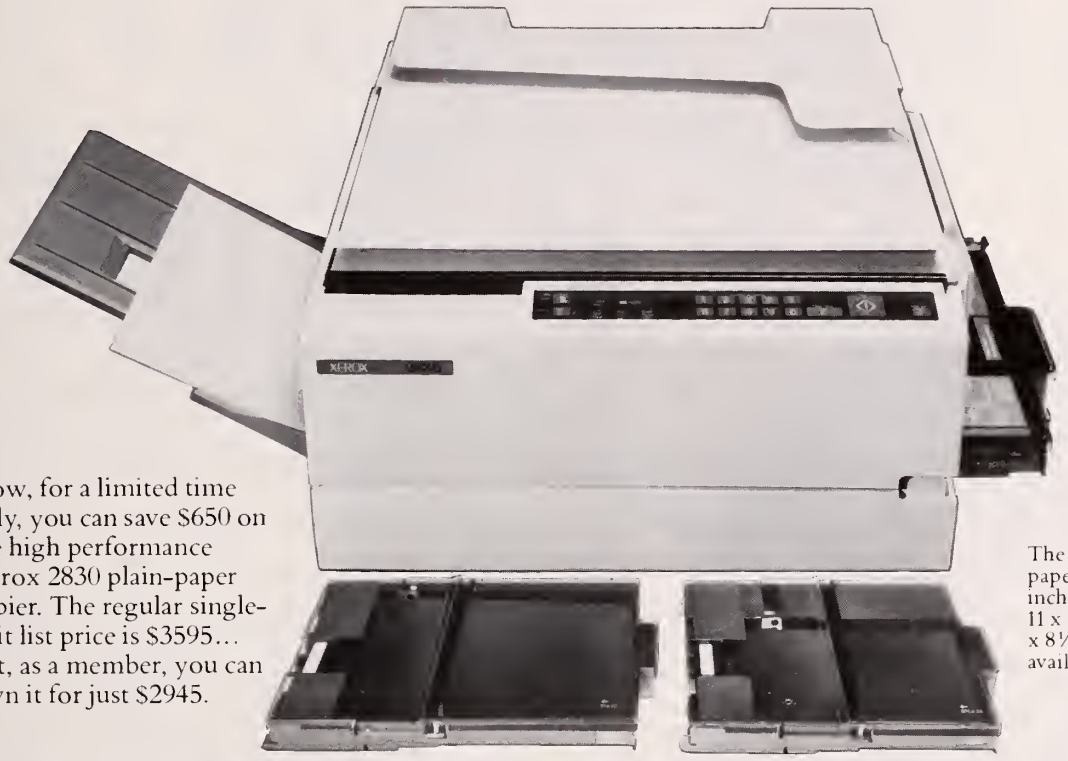
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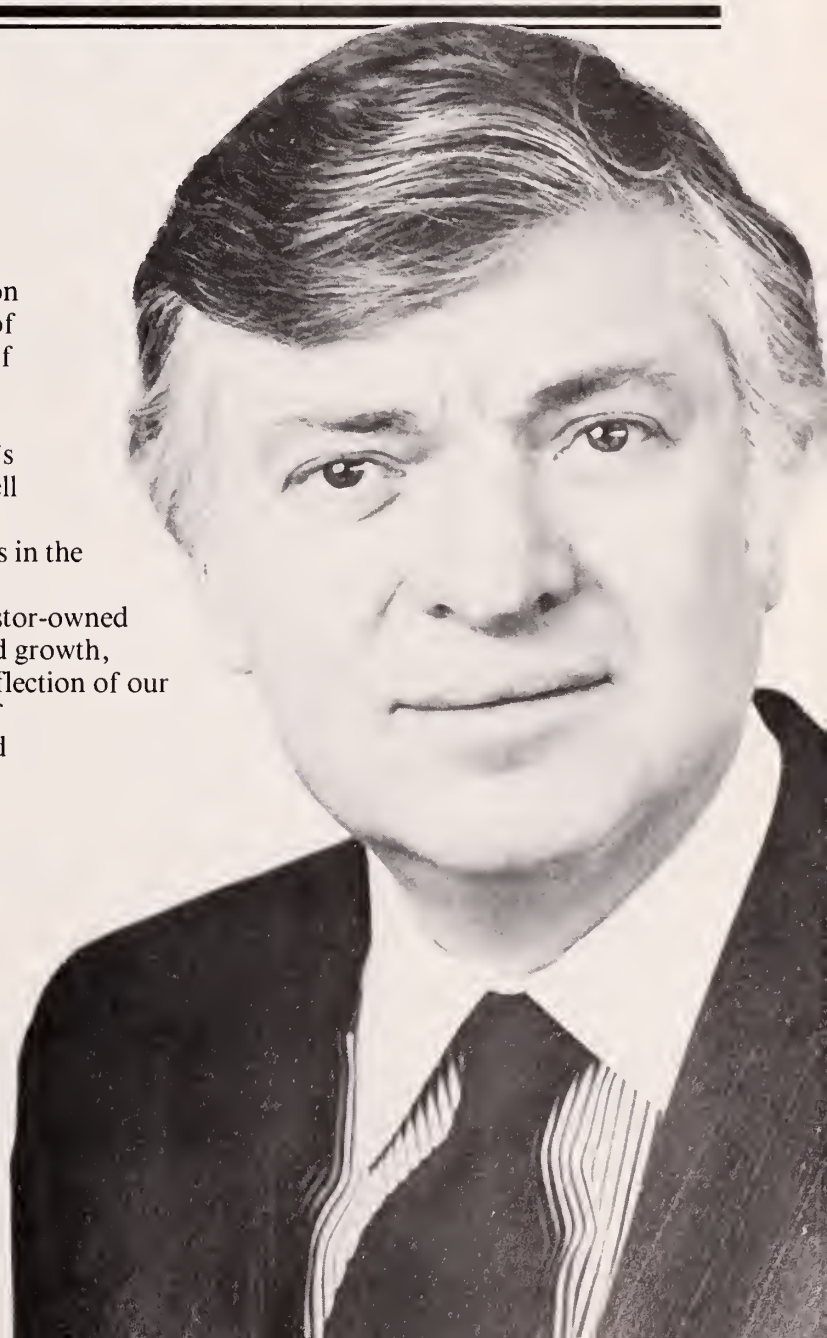
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JUNE 1983, Vol. 70, No. 6

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J. Lee Dockery, M.D., Associate Dean, University of Florida College of Medicine, was installed at Hollywood on May 8, 1983, as the 107th President of the Florida Medical Association. President Dockery is an Obstetrician/Gynecologist.

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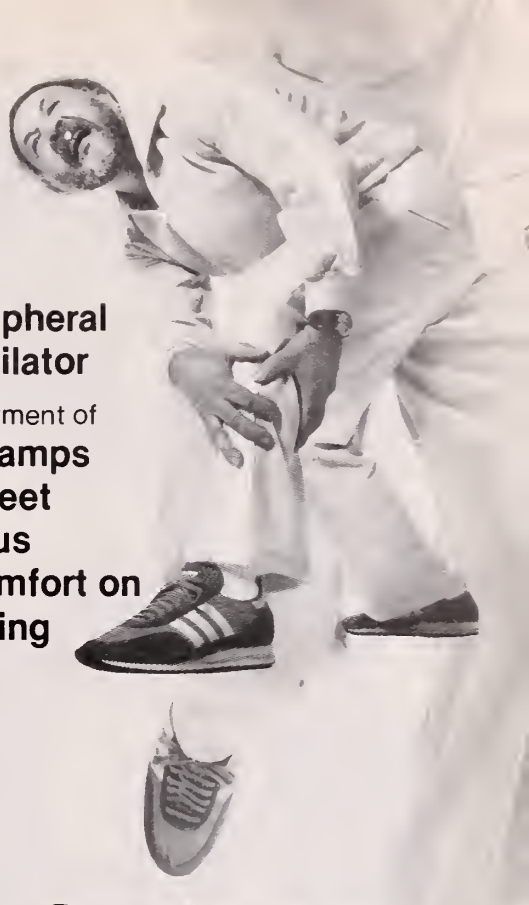
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WHO WE ARE.

We are Pain Resource Center.

We are an organization devoted to the development of educational materials in the fields of pain. Our courses are designed for clinical relevance, distilled from current research and clinical practice. They are created by highly capable specialists in their field.

WHY WE ARE.

Reason Number One. Pain is a rapidly growing realm of medical study. The findings should directly affect the quality of primary care.

But the knowledge is inter-disciplinary. So is the literature.

The result? Valuable information that will improve your practice, fifteen to twenty years of it, uncondensed and scattered among many journals.

Information that is hard to find and not integrated.

This is our challenge and our goal.

Reason Number Two. Within the past decade a few medical and dental schools have added the study of chronic pain to their programs. We applaud those institutions.

But for you, the practicing clinician, there has been no continuing education equivalent. Until now.

Now there is Pain Resource Center, an educational company that turns contemporary knowledge into practical application.

PERSONAL EXPERIENCE, PROFESSIONAL SYSTEM.

Pain is a personal experience. It transcends the merely anatomical. Thus The Chronic Pain Patient builds a bio-psycho-social model of understanding.

It is a systematic approach that helps you understand and integrate the symptoms of a patient's suffering. It allows you to appreciate the interrelationships between the biological, psychological and behavioral. You learn to recognize problem areas and avoid pitfalls.

The course introduces you to the full spectrum of the chronic pain syndrome. It makes clearer many often subtle and troublesome aspects.

It articulates today's exciting variety of therapeutic modalities. And discusses the limitations and hazards every therapy carries.

THE COURSE.

If we thought you would read it line for line, we would print only the Table of Contents in this ad and let the course speak for itself.

Take just twenty seconds with the list of topics. And, please ask yourself whether these are skills your practice can do without.

A. Introduction And Background

B. Definitions: 1. Pain, 2. Organic vs Psychogenic Pain, 3. Acute vs Chronic Pain

C. Pain Theories-Neuroanatomy And Neurophysiology

D. Neurochemistry Of Pain

E. Pain Measurement: 1. Introduction, 2. Pain Threshold, 3. Pain Tolerance, 4. Experimental vs Clinical Pain, 5. Pain Scales: a. Percentage Method, b. Numerical and Verbal Rating Scales, c. Visual Analogue and Graphic Rating Scales, D. Pain Matching Tests, e. Pain Language, f. Sensory Decision Theory, g. Cross Modality Matching

F. Overview Of Disorders Associated With Chronic Pain

G. Drug Abuse And Chronic Pain

H. Common Characteristics Of Chronic Pain Patients

I. Psychological Defensive Use Of Pain

J. Pain Prone Patients

K. Clinical Course Of Chronic Pain

L. Psychiatric Disorders And Chronic Pain: 1. Introduction, 2. Affective Disorders, 3. Chronic Pain And Depression, 4. Organic Mental Disorders, 5. Substance Use Disorders, 6. Schizophrenic And Paranoid Disorders, 7. Anxiety Disorders: a. Agoraphobia, b. Generalized Anxiety Disorder, c. Obsessive Compulsive Disorder, d. Post-Traumatic Stress Disorder, 8. Somatoform Disorders: a. Somatization Disorder, b. Conversion Disorder, c. Hypochondriasis, 9. Factitious Disorders And Malingering, 10. Adjustment Disorder, 11. Psychological Factors Affecting Physical Conditions, 12. Personality Disorders: a. Histrionic, b. Dependent, c. Compulsive, d. Paranoid, e. Schizoid, f. Schizotypal, g. Narcissistic, h. Antisocial, i. Borderline

M. Evaluation Of The Chronic Pain Patient: 1. Biomedical vs Biopsychosocial Model Of Illness, 2. General Principles And Technique In Evaluation And History Taking, 3. Demography, 4. Present Pain History, 5. Past Treatment, 6. Medication History, 7. Medical History, 8. Patient Attitudes, Expectations And Goals, 9. Employment And Compensation Issues, 10. Activity Level, 11. Regressive Behavior, 12. Developmental, Family



Please send me____copies of The Chronic Pain Patient: Theory, Evaluation and Treatment. I will return it within thirty days for a full refund if not entirely satisfied Enclosed is my check or money order for $150 per course to include product, postage and handling. North Carolina residents add 4% sales tax to their order.

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And Marital History-Support System, 13. Sexual History, 14. Premorbid And Present Psychosocial Factors, 15. Mental Status Examination-Review, 16. Locus Of Control, 17. Patient Education, 18. Referral, 19. Behavioral Evaluation And The Learning Model, 20. Stress, 21. Psychological Testing: a. Minnesota Multiphasic Personality Inventory (MMPI), b. Chronic Pain Battery (CPB)

N. Treatment Of The Chronic Pain Patient: 1. Introduction, 2. Overview Of Treatment Approaches, 3. Treatment Goals, 4. General Management Principles: a. Office Visits, b. Redefine Problem as "Chronic", c. Use of Habituating Drugs, d. Time-Contingent Medication, e. Reduce Iatrogenic Morbidity, f. "Denial" and Use of Significant Others, g. Behavioral Approaches-Operant Learning, h. Remobilization and Activity Program, i. Stress Management, j. Managing Psychosocial Factors, k. Use of Support System, l. Role Clarification-Therapeutic Contract, **5. Pharmacological Treatment Of Chronic Pain:** a. Introduction, b. General Principles, c. Antidepressants, d. Narcotic Analgesics, e. Mild Analgesics and Non-Steroidal Anti-Inflammatory Agents, f. Sedative-Hypnotics and Minor Tranquilizers, g. Detoxification, h. Major Tranquilizers-Neuroleptics, i. Placebos, **6. Individual Psychotherapy, 7. Group Therapy, 8. Nerve Blocks, 9. Transcutaneous Electrical Nerve Stimulation, 10. Acupuncture, 11. Biofeedback And Relaxation Exercises, 12. Hypnosis**

O.Patient Attitudes, Interpersonal Pain Transactions And The Doctor-Patient Relationship

P.Conclusion

Parts In Particular.

We cannot describe the whole course. We can point to specifics. Here are four parts of this course that receive extra emphasis. They are aspects of chronic pain care too often overlooked.

Pharmacology Of Pain. This section alone may pay for the course in peace of mind.

Improper drugs can dramatically increase iatrogenic risk. Chronic pain requires a knowledge about medication that the standard literature frequently does not provide.

Here then is a full delineation of the proper uses, advantages and dangers of the most commonly used medications for chronic pain.

Antidepressants covered in detail.

A rational pharmacological approach.

Psychiatric Disorders. This section discusses, in down-to earth detail, patterns of behavior often associated with chronic pain. You will recognize patients of your own.

Psychiatric disorders in response to pain, and those that pre-date it.

Depression and chronic pain in extensive detail.

The basis for diagnosis of emotional states which you frequently encounter.

Evaluation. Treatment can be only as successful as the diagnosis that suggests it. This is especially true for the chronic pain patient.

He or she has a multi-dimensional problem. So evaluation, too, must be multi-dimensional.

This extensive section of The Chronic Pain Patient replaces trial and error with a thorough, practical, detailed approach to evaluation technique and history taking.

A system of evaluation that accounts for complexity, and translates into a rational management strategy.

Management Strategy. Good pain management strategies grow from the richness of informed evaluation. The best of them are nurtured by well-forged relationships.

This course doesn't just instruct you. It helps you educate the patient. So together you can set realistic goals. And commit these goals to contract.

The result is a doctor-patient alliance. And a willing partner rather than a willful opponent.

Successful management strategies and techniques are detailed, as well as how you can deal with frequently encountered problems.

Professional System, Personal Benefit.

The Chronic Pain Patient offers knowledge, yes.

But it offers time too. Because well-conceived treatment is efficient treatment. (Ask yourself: What percentage of your patient population suffers chronic pain? Then compare that to the percentage of your time they take.)

The course also increases confidence. Your goals become more realistic. The unforeseen becomes the anticipated.

Best of all, this course can turn potential frustration into a deserved sense of satisfaction. For you and for the patient.

CME That Makes A Difference.

Credit earned from listening to this course may be claimed in Category V of the Physician's Recognition Award of the American Medical Association.

Invest in CME that can make a real difference.

Sample The Chronic Pain Patient for thirty days. You will be investing in a better practice. And in better care for people who need it.

The Author

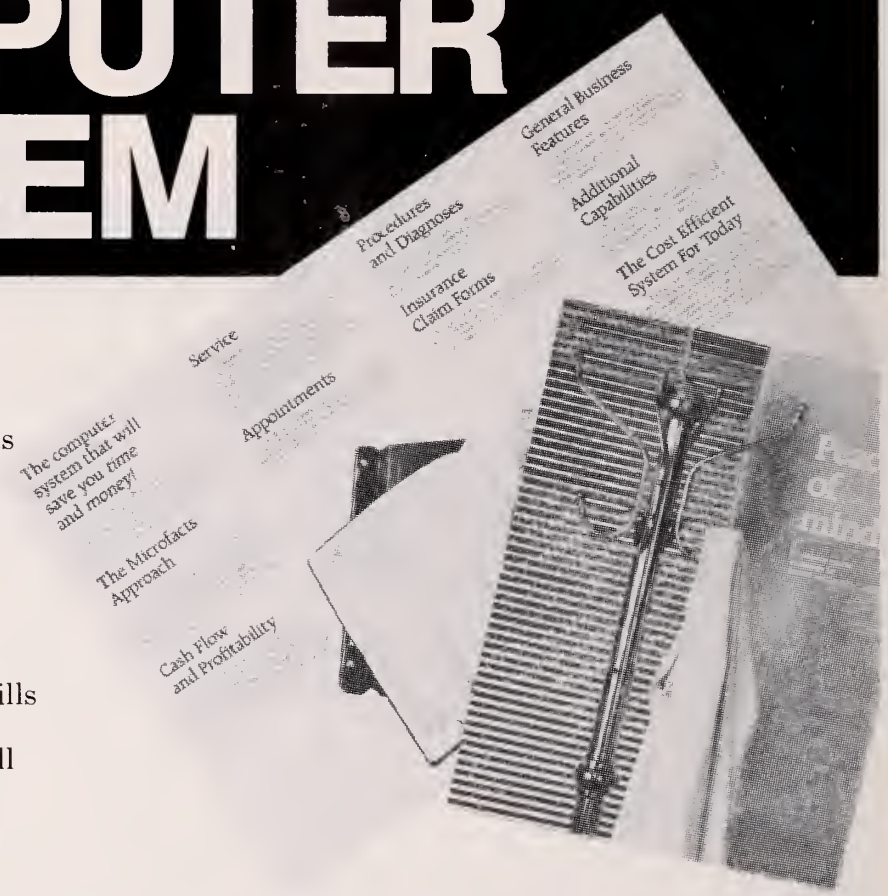
Stephen R. Levitt, M.D., Ph.D. received his medical school training at Case Western Reserve University, Cleveland, Ohio. He served as postdoctoral research fellow at that university for two years and has several additional years experience in exploratory and applied research. Dr. Levitt received his psychiatric training at the University of North Carolina, School of Medicine and North Carolina Memorial Hospital in Chapel Hill. He presently is in private practice and serves on the Clinical Faculty, Department of Psychiatry, University of North Carolina. For five years he has been psychiatric consultant to the University of North Carolina Multidisciplinary Pain Center. This center has been affiliated both with the School of Medicine and Dentistry. Dr. Levitt has extensive experience as a teacher and consultant to physicians, dentists and other clinicians involved in the delivery of care to chronic pain patients. It is from this experience that this course is derived.

Dr. Levitt is a member of numerous organizations including the American Psychiatric Association, the Academy of Psychosomatic Medicine, the American Pain Society and the International Association for the Study of Pain.

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PRESIDENT'S PAGE

Rededication in the year ahead



It is impossible for me to express the emotions that I feel as I begin my year as President of this fine organization. I am filled with gratitude, humility, fear, appreciation and much more. I am grateful to my county medical society for its confidence in me. I am grateful to the Gator Group of county societies, and I am grateful to the man with whom I work, Dr. William B. Deal, as my colleague and friend, who has given me permission to accept this important position.

I am also grateful to my family — my wife and children — for their continued support and assistance and their caring way that permits me to commit my time and energy to fulfill this responsibility. I thank each of you, my fellow FMA members, for your expressions of support and commitment that allows us to work and to be what we are together.

Each of you participates in the operation of the FMA, in the process that we both cherish and enjoy. I hope to call on each of you for your help in our efforts to work together this year. The professional liability is a grave threat to all physicians and to the patients we serve, but it is not our only problem.

Some concerns that I have, together, we can work to resolve. I am concerned about the cost of health care and that we are being blamed inappropriately for these high costs. But if the blame is not inappropriate, I hope that we can correct the problems.

In his address at the Anual Meeting of the FMA last year, President Windom said he would work to strengthen the "House of Medicine" by promoting membership in our county medical societies, the FMA and the AMA. I promised to help him get insurance for his "House" and I hope I have been helpful, although that job is a long way from completion.

Most of all, I am concerned about our image — how we look and how we are perceived. It matters not whether the cartoon that appeared recently in the *Miami Herald* — and others like it that depict physicians as greedy and uncaring — are accurate. If that is the image of Medicine, there is something bad wrong. I think we are depressed, disorganized, apathetic; and sometimes, we are hostile and defensive. If the only message we send to our patients is that we are economically motivated, then we are failing in the very basics of communication.

Why do we need to spend large sums of money on a public relations campaign when every patient who gives us the honor of being their physician should be pleased with our care? I think we must rededicate ourselves to the reasons we chose to practice the most wonderful profession in this country and throughout the world. We participate regularly in the saga of life and death, sadness and happiness. We are right where the action is, and if we rededicate ourselves to choosing students who go into this wonderful career as humanitarians as well as academicians, then will we not at the same time rededicate ourselves to our mission?

If we give every patient the kind of care that we would want for ourselves and for our families, and if we communicate in the way that we should, medicine will come off the ropes. Each of us as physicians can accept this baton and this charge. We can spread this rededication among our colleagues. We must tell our story of our great profession. Please — each and every one of you — help me do that this year.

J. Lee Tackett



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Cumulative sedative effects are rare

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Agent of change

Ativan®

for (lorazepam)IV

Anxiety

See important information on following page.

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Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown, but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia, some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Ativan®(IV) for (lorazepam) Anxiety

DOSAGE: Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.

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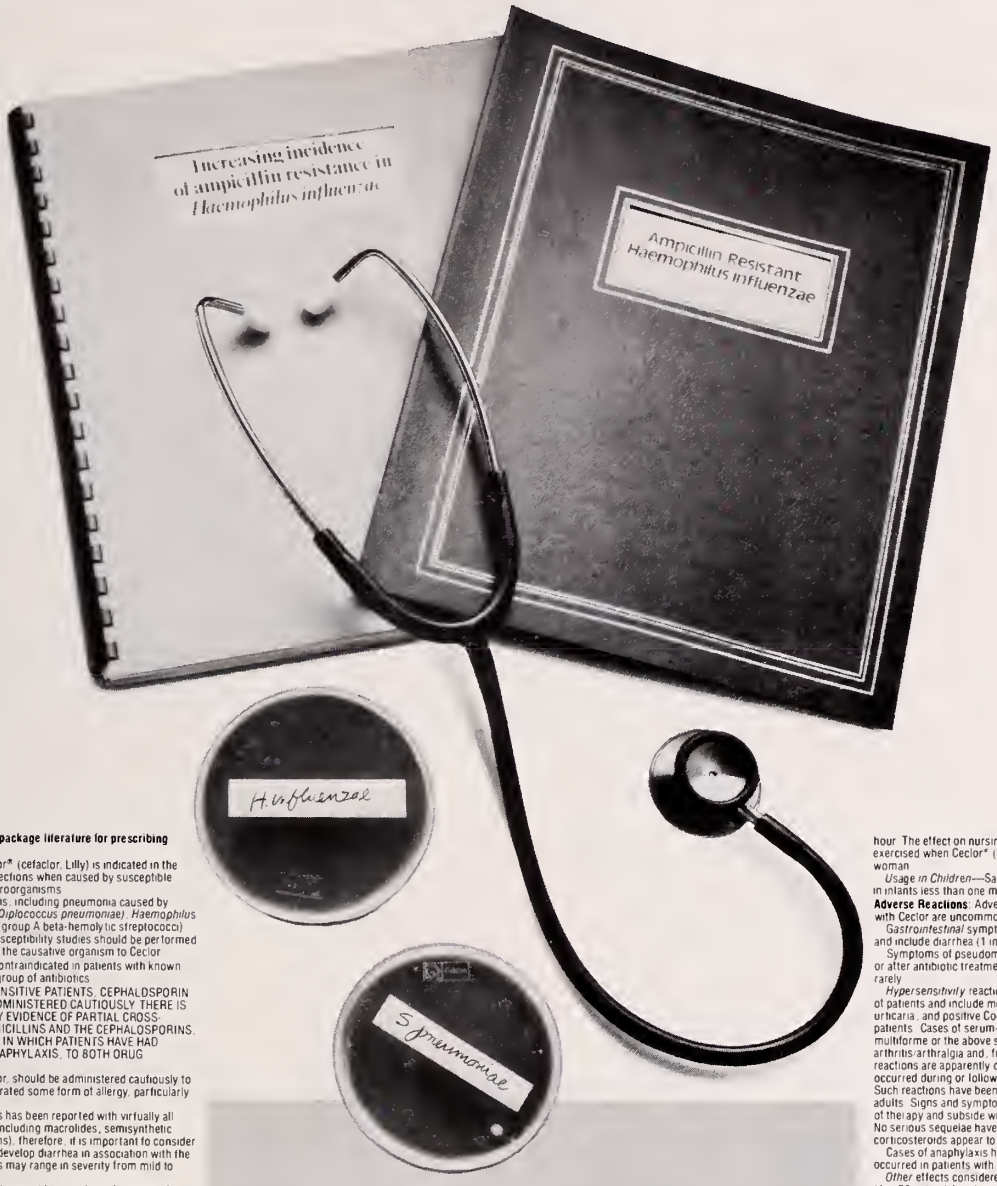
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Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

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cefaclor
Pulvules®, 250 and 500 mg

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae* (*Diplococcus pneumoniae*), *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out

Precautions: *General Precautions*—If an allergic reaction to Ceclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly)

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis

Usage in Pregnancy—Pregnancy Category B—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed

Nursing Mothers—Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor* (cefaclor, Lilly) is administered to a nursing woman

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70)

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients)

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic—Slight elevations of SGOT, SGPT, or alkaline phosphatase values (1 in 40)

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200)

[061782R]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.†

†*Note*: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information

References

1. Antimicrob. Agents Chemother., *8*: 91, 1975
2. Antimicrob. Agents Chemother., *11*: 470, 1977
3. Antimicrob. Agents Chemother., *13*: 584, 1978
4. Antimicrob. Agents Chemother., *12*: 490, 1977
5. Current Chemotherapy (edited by W. Siegenthaler and R. Luthy), II:880. Washington, D.C.: American Society for Microbiology, 1978
6. Antimicrob. Agents Chemother., *13*: 861, 1978
7. Data on file, Eli Lilly and Company
8. Principles and Practice of Infectious Diseases (edited by G.L. Mandell, R.G. Douglas, Jr., and J.E. Bennett), p. 487. New York: John Wiley & Sons, 1979

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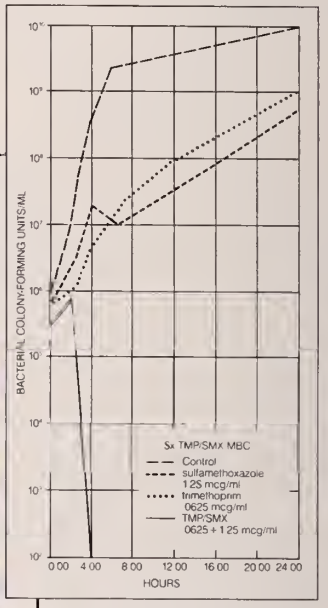
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J-9043-4 July 1981

In vitro studies demonstrate

Bactericidal activity with minimal resistance

RAPID *IN VITRO* DESTRUCTION OF *E. COLI**



Kill curve kinetics of Bactrim and its individual components against *E. coli in vitro*.[1]

Percent of isolates of common uropathogens sensitive to BACTRIM and to other antimicrobials

	Escherichia coli	*Klebsiella pneumoniae*	*Proteus mirabilis*	*Proteus vulgaris*	*Proteus sp.*	*Enterobacter sp.*	*Enterobacter aerogenes*	*Enterobacter cloacae*
BACTRIM	**96%** 328,598	**89%** 63,551	**93%** 62,691	**84%** 4174	**91%** 4381	**88%** 1736	**96%** 7326	**92%** 11,856
ampicillin	72% 345,209	5% 65,466	85% 67,338	16% 4381	70% 4402	10% 1775	9% 7759	11% 12,091
cephalexin†	81% 343,339	85% 67,031	92% 67,027	16% 4398	80% 4365	22% 1834	13% 7571	12% 11,846
nitrofur-antoin	97% 307,785	65% 61,162	7% 59,775	13% 3848	14% 3059	67% 1707	60% 7109	67% 10,830

†Analogous to cephalothin, the primary antibiotic disc used in testing.
Source: The Bacteriologic Report, BAC-DATA Medical Information Systems, Inc., Winter Series, 1981-82.
Numbers under percentages refer to the projected number of isolates tested

The bactericidal action of Bactrim has been demonstrated *in vitro* on laboratory strains of *E. coli*[1,2] and on clinical isolates of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis* and *Morganella morganii*[3]—the most common causative organisms of urinary tract infections.[4] More than 100 published studies attest to the efficacy of Bactrim in recurrent urinary tract infections due to these organisms.[5] In comparative studies with other antimicrobials, Bactrim has consistently demonstrated unsurpassed efficacy during therapy.[6-11]

Resistance to Bactrim develops more slowly than to either of its components alone *in vitro*.* Among urinary tract isolates, resistance has rarely emerged in susceptible strains.[5,12] Bactrim is contraindicated in pregnancy at term, during lactation, in infants less than two months old and in documented megaloblastic anemia due to folate deficiency.

Initial episodes of uncomplicated urinary infections should be treated with a single-agent antimicrobial.

Bactrim™ DS

(trimethoprim and sulfamethoxazole/Roche)

b.i.d. *for recurrent urinary tract infections*

**In vitro* data do not necessarily predict clinical results.

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See next page for references and a summary of product information.

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Kramer MJ, Mauriz YR, Robertson TL, Timmes MD: Morphological studies on the effect of subinhibitory and inhibitory doses of sulfamethoxazole-trimethoprim combination on *Escherichia coli*. Presented at the 12th International Congress of Chemotherapy, Florence, Italy, Jul 19-24, 1981. 3. Spicehandler J *et al: Rev Infect Dis 4*:562-565, Mar-Apr 1982. 4. Stamey TA: *Pathogenesis and Treatment of Urinary Tract Infections*. Baltimore, Williams & Wilkins, 1980, p. 13. 5. Ronald AR: *Clin Ther 3*:176-189, Mar 1980. 6. Cooper J, Brumfitt W, Hamilton-Miller JMT: *J Antimicrob Chemother* 6:231-239, 1980. 7. Gower PE, Tasker PRW: *Br Med J 1*:684-686, Mar 20, 1976. 8. Cosgrove MD, Morrow JW: *J Urol 111*:670-672, May 1974. 9. Iravani A *et al: Antimicrob Agents Chemother 19*:598-604, Apr 1981. 10. Schaeffer AJ, Flynn S, Jones J: *J Urol 125*:825-827, Jun 1981. 11. Rous SN: *J Urol 125*:228-229, Feb 1981. 12. BAC-DATA Medical Information Systems, Inc., Bacteriologic Reports, Winter Series, 1976-82.

Bactrim™ DS

(trimethoprim and sulfamethoxazole/Roche)

Before prescribing, please consult complete product information, a summary of which follows:
Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.
For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.
For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.
For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.
Also for the treatment of documented *Pneumocystis carinii* pneumonitis.
Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.
Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, hepatocellular necrosis, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.
Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients. *Pregnancy:* Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.
Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, hepatocellular necrosis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.
Dosage: *Not recommended for infants less than two months of age.*
URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:
Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.
Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.
For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.
ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:
Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.
PNEUMOCYSTIS CARINII PNEUMONITIS:
Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.
Supplied: *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 20. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per tea spoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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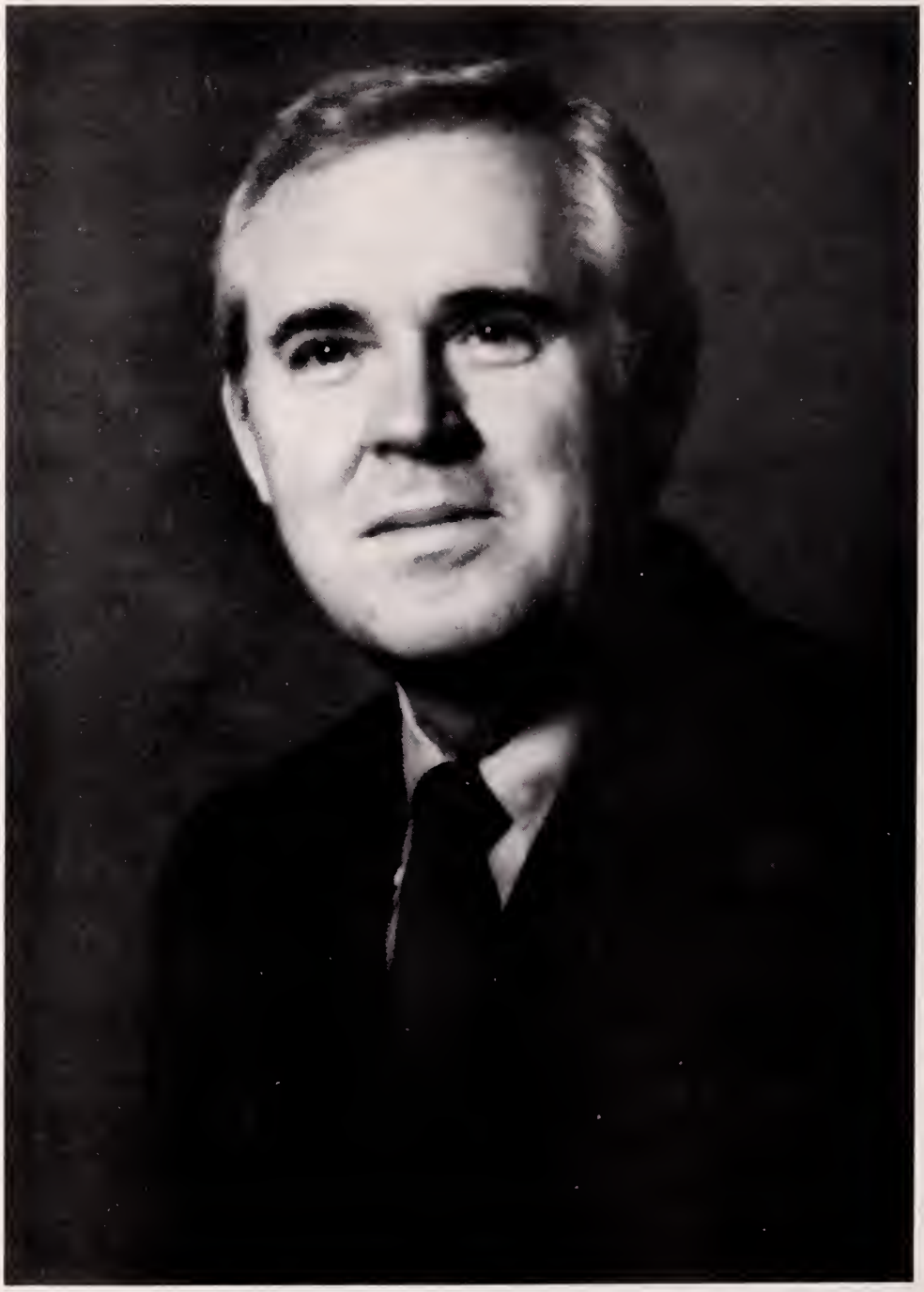
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J. Lee Dockery, M.D.
107th President
Florida Medical Association

Reflections on J.L.D.

From Lee Dockery's early days as the oldest child on a farm in rural Arkansas, it was clear that he was destined for leadership. After a few years of farm life, his family moved to nearby Hot Springs where Lee obtained his primary and secondary school education. During school and the intervening summers, he worked in his father's "cash and carry" grocery store — stocking shelves, packing groceries, taking inventory,and delivering groceries to those who ordered by telephone.

His high school classmates and teachers named him the "Most Outstanding Graduate." After three years at the University of Arkansas, he was accepted to the University of Arkansas School of Medicine.

Following graduation, Lee became an Intern at Jackson Memorial Hospital in Miami where he was named "Most Outstanding Intern." After a residency in Obstetrics and Gynecology, the Dockerys (now Lee and Barbara) moved to Spain where Lee fulfilled his military obligation. By choice, they lived in the community and not on the Air Force base. A desire to learn about Spanish culture and the language is characteristic of the enthusiasm for new knowledge that Lee possesses. His military duty culminated by the award of the Air Force Commendation Medal — a unique honor for peacetime service.

Private practice in Miami with a group of distinquished obstetricians-gynecologists was marked by continued enthusiasm, dedication, energy, and loyal patient care.

Stimulated by teaching and new knowledge, Lee nurtured a busy private practice but allocated time to be active as a volunteer faculty member at the University of Miami. Throughout the twelve years in Miami, the Dade County Medical Association and the Florida Medical Association were a high priority. Typically, however, the Dockery family (now Barbara, daughters Kim and Laura, and son Michael) were foremost.

When the College of Medicine's Department of Obstetrics and Gynecology's new leadership made medical student education a top priority in the mid-seventies, once again Lee was enticed by new challenges to leave Miami and join the full-time faculty at the University of Florida College of Medicine. Within weeks, the clerkship was vastly improved and began to receive laudatory remarks from medical students, and standardized test scores reflected marked improvement. His talents as teacher and advisor were recognized by the most critical body of all — medical students — by his selection as Teacher of the Year and in 1978 as winner of the coveted Hippocratic Award.

In the summer of 1978, I asked him to serve as the Associate Dean of the College of Medicine. Clearly, in the three years that he had been on our faculty, Lee had gained the respect and admiration of the students, faculty, and staff. As predicted, the job of Associate Dean was embraced with enthusiasm, dedication, and sensitivity.

A recitation of his numerous accomplishments is needless. However, the leadership demonstrated and documented by Lee Dockery in the past is a harbinger of his leadership as President of the Florida Medical Association.

Hard work is not foreign to Lee Dockery. Twelve hour days are the rule, not the exception. This work ethic is only surpassed by his loyalty to medicine, friends...and family.

Reflections upon him in the past eight years are highlighted by these observations: No task is too small not to be completed efficiently and thoroughly. A very busy schedule can be interrupted for an inquiry which is received with attentiveness and sensitivity. A complex issue can be reduced to several simple ones quickly and a reasonable course of resolution reached. A reluctant individual being requested to do a task, quickly and enthusiastically consents. The recipient of a negative answer is informed in a manner that the person not only understands but agrees. Yes, we the membership of the Florida Medical Association are fortunate.

The following sentence from Lincoln's Gettysburg Address" could have been written by J. Lee Dockery, M.D.:

> It is for us the living rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced.

William B. Deal, M.D.
Dean, College of Medicine
Associate Vice President
for Clinical Affairs
University of Florida

Criticism is a four letter word: Grow

All knowledge attains its ethical value and its human significance only by the humane sense in which it is employed. Only a good man can be a great physician.

Hermann Nothnagel

Subjected to repeated professional liability suits, reprimanded for setting fees in violation of antitrust laws, criticized for practicing in non-competitive manners and forced to revise and rewrite its ethical standards by government edict, medicine is no longer perceived as a profession in the traditional sense.

Vital to the public because of its essential services, characteristics of the profession: restricted entry, prescribed education, licensing processes, a code of ethical behavior, the right to police the behavior of its members, and the privilege to engage in price descrimination, are being whittled away. Publicized more often as seeking profits rather than to serve, as being more concerned with assured payment of fees rather than with the welfare of the patient, strengthens the perception of profiteering on the part of physicians. For if one acts like a merchant with hours the same, one should expect to be regulated by the same restraints. Specialization, exploitation by industry, for-profit hospitals, HMO assembly line efficiency, coupled with non-performance of expected treatment has led many patients to dissatisfaction and a desire to achieve restitution or revenge.

Continued criticism and regulations can eventually become so unendurable that some form of socialized medicine will be accepted as the only expedient solution. Following this will be a loss of efficiency resulting in further loss of personal dedication and the joy of belonging to a respected profession, while the public, far too late will realize that they also are the losers.

What with the litiginous atmosphere of the nation, the mobility of society and the intensity of today's consumerism, a rebirth to a true profession will not be easy. Needed is a widely accepted code of behavior, procedures for surveillance and discipline, methods of instructing members as to proper behavior within the profession, all long missing but so reflective of the general lack of moral duties and obligations in todays society.

Is it then prophetic that our new president, an articulate academician, graduated from private practice, is a dedicated obstetrician; that the House of Delegates at the Annual Meeting overwhelmingly supported an FMA sponsored state wide PRO; or that we are united by one cause common to us all, the professional liability crises.

So to guard the traditions and ideals of this profession, now is the time for all who love it, to reread the Hippocratic oath, to listen to one's patient with one's heart, to support organized medicine and its elected officials, and to redevote one's self in an uncompromising way to one's calling, to revise one's life, one's offices and one's practice so that the public will again recognize a physician concerned with their best interest. Better understanding our problems, they will lend us support. This can't be accomplished in a year, but there's no better time to start than right now.

C.M.C.



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When the history reveals anxious depression...

For the estimated 70 percent of nonpsychotic depressed patients who are also anxious,[1] Limbitrol provides both amitriptyline, specific for symptoms of depression, and the effects of Librium® (chlordiazepoxide HCl), the tested and dependable anxiolytic. Limbitrol is, therefore, a better choice for these patients than dual agents that contain a phenothiazine, a class of antipsychotic drugs used infrequently in nonpsychotic patients.[1]

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Limbitrol also has a rapid onset of action which may lead to greater patient compliance. In a multicenter study, patients taking Limbitrol experienced 62% of their overall improvement within the first week of therapy.[2]

In another multicenter study,[3] the following symptoms associated with anxious depression were significantly reduced during the first two weeks of therapy:

- ☐ Headache—79%
- ☐ Early insomnia—91%
 Middle insomnia—87%
 Late insomnia—89%
- ☐ Gastrointestinal upset—73%

In two multicenter studies, only 1.9% of Limbitrol patients experienced cardiovascular side effects.[3]

Patients should be cautioned about the combined effects with alcohol or other CNS depressants and about activities requiring complete mental alertness such as operating machinery or driving a car.

References: 1. Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine,* edited by Jorvik ME; New York, Appleton-Century-Crofts, 1977, p. 316. **2.** Feighner JP *et al: Psychopharmacology 61:* 217-229, Mar 1979. **3.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

In moderate depression and anxiety

Limbitrol® IV

Tablets 5-12.5 each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)
Tablets 10-25 each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt)

Please see summary of product information on following page.

LIMBITROL®' TABLETS'Ⓝ Tranquilizer—Antidepressant
Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of moderate to severe depression associated with moderate to severe anxiety.
Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.
Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).
***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage; withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).
Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.
Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.
The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:
Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.
Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.
Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.
Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.
Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.
Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.
Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.
Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.
Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly.
Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.
How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.

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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION, INC.
JUNE 1983, Vol. 70, No. 6

Somatosensory cerebrally evoked responses in neurologic differentiation of organic vs. nonorganic impotence

Jacob Green, M.D., R.D. Baugh, P.A., Richard Gildemeister, P.A.-C., and T. J. Driber, P.A.

ABSTRACT: An initial report is presented concerning utilization of pudendal nerve somatosensory (cerebrally) evoked responses associated with other more commonly used neurophysiologic parameters in concert. This methodology may be of significant use in the diagnosis of sexual and bladder dysfunction of a neurologic etiology. These methods may help in the clinical investigation of bladder dysfunction, retention, incontinence, ejaculatory, and rectal outlet disturbances along with disorders of sexual responsiveness.

The Authors
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Dr. Green practices Neurology at the Neurology Clinic in Jacksonville; Mr. Baugh is the Associate Director of the Florida Neurological Institute, Inc., in Jacksonville; Mr. Gildemeister is a Physician Assistant at the Neurology Clinic in Jacksonville; Mr. Driber is Director of the Florida Neurological Institute, Inc., in Jacksonville.

A relatively simple methodology is described for clinical use in assessment of the neural circuitry involved in genitourinary function. The functions of the peripheral and central nervous systems are assessed by peripheral nerve conduction studies in conjunction with pudendal nerve stimulated cerebrally recorded somatosensory evoked responses. This method allows a relatively precise evaluation of neuropathologic genitourinary states.

The differential diagnosis of "functional" versus organic dysfunction of sexual and genitourinary functions is often a difficult clinical problem for the physician.[1-3] Development of basic electrodiagnostic evaluative techniques[4-16] and establishment of normal control values have recently been promulgated. Reviewing Haldeman and his associates' pioneering work[17] utilizing somatosensory (cerebrally) evoked potentials, we have evolved a similar but somewhat more simplified methodology to clinically assess difficult diagnostic problem patients with significant genitourinary disorders.

Materials and methods • Utilizing standard commercially available neurophysiologic testing equipment which included the capability of cerebral somatosensory evoked response averaging along with peripheral nerve conduction velocity determinations, we evaluated a small series of male and female patients with clinical sexual and genitourinary problems.

A complete history was obtained and a general physical and detailed neurologic examination carried out with all neurophysiological diagnostic tests being performed in a dimly lit, warm, relaxed atmosphere following a patient instruction session. Peripheral stimulation of the peroneal nerves at the popliteal

fossa was carried out via unilateral sequential (left then right) stimulation. This portion of the study was accomplished in order to assess the input of the cerebral evoked signals from the peroneal nerves to the thalmocortical axis. The rate of stimulation was two stimuli per second. Recording averaged sensitivity was 5 nv per division; low linear frequency filter of 10 Hz and high frequency filter of 1 kHz were used. The duration of the square wave stimulation was .1 msec and the intensity was constant for each patient to 1/3 over just noticeable stimulated sensation as verbally acknowledged by each individual (this was 2/3 below the patients' perceptible pain level to the stimulus). Stimuli were presented by a distal anode and proximal cathode electrodes. In the male pudendal nerve responses were evoked by ring electrodes snugly placed around the penis 3 cm apart. In female patients following the method of Haldeman and his associates[17] 5 mm cup Silver-Chloride electrodes were placed with the anodes adjacent to the clitoris and the cathode 1 cm from each anode superiorly located between each of the labia minora and labia majora.

The active recording electrode was placed 2 cm behind Cz, international 10-20 (system). The forehead (glabella) region was used for the location of the reference electrode. All electrode inpedances were kept below 2000 ohms by cleaning the skin with Omniprep[3] and application of Grass[3] electrode paste. The ground electrode was applied midway between the active and reference electrode.

For recording the peripheral bulbocavernosus reflex (BCR), the active recording electrode was placed at the anterior (12 o'clock) portion of the rectal mucosa at the cutaneous junction. The reference electrode was placed on the left iliac crest. Square wave electrical stimuli were delivered at approximately 2 per second. The ground electrode was placed over the left thigh proximal and medial to the active recording electrode. An average of 30 to 50 responses was recorded using a sampling time of 100 msec poststimulus. The stimulus was again penile or clitoral as described previously.

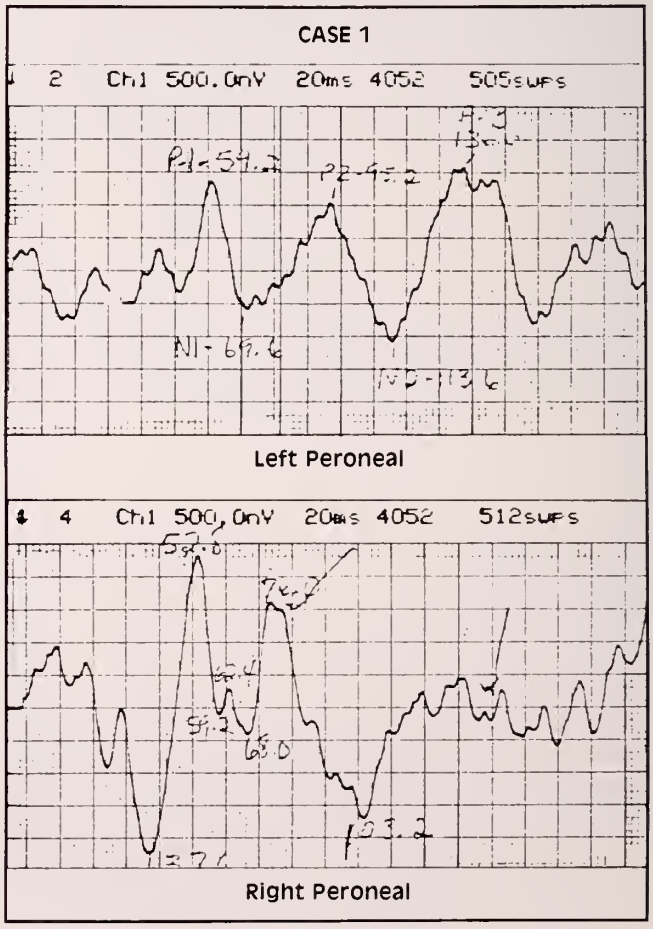
We elected not to utilize an evaluation of the lumbar spinal evoked potential signal. The reasoning was the prior employment of more standard electrodiagnostic and neurophysiological diagnostic studies. These consisted of lower extremity motor (peroneal nerve and posterior tibial nerve) and sensory (sural) nerve conduction studies and H reflex testing (soleus muscle) bilaterally. The results are reported in each patient's case history.

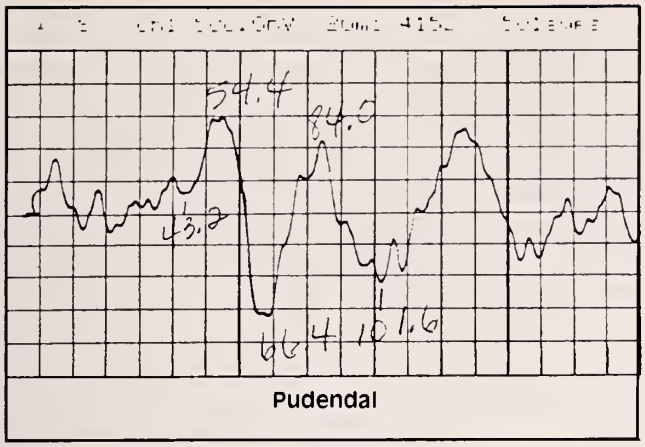
The recording of neurophysiologic data was carried out in two separate phases. A comparison was made between the cerebrally recorded somatosensory evoked potential due to pudendal nerve stimulation and the cerebrally recorded SEP from the common peroneal nerve stimulated at the knee. We elected not to use the more distant posterior tibial nerve at the ankle because of the added distance of peripheral sensory nerve conduction towards the central neuraxis.

The second phase of our study consisted of the stimulation of the pudendal nerve with recording of the peripherally evoked bulbocavernosus reflex. We utilized the same neurophysiologic electrodiagnostic apparatus for an assessment of this afferent pudendal nerve to spinal cord to S2, 3, 4 segmental peripheral nerve in order to assess the efferent (peripheral) limb of the reflex arc.

Case reports • Case 1. — A 48-year-old thrice married male had been totally impotent for approximately three months, the same precise time frame in which severe, painful diabetic neuropathy developed and also serious emotional stress. He initally presented with back pain and bilateral leg numbness with significant decreased reflexes in the legs. Myelography was negative for a structural lesion. Routine neurophysiologic diagnostic studies gave clear indication of a mild peripheral neuropathy; findings showed conduction velocities were decreased 10-15% in the peroneal tibial nerves. EMG revealed an increased number of fibrillations diffusely present in the lower extremity musculature. The patient's GU neurophysiologic assessment was carried out by utilization of somatosensory evoked cerebral recorded responses from the common peroneal nerves as compared to the penile pudendal nerve. Input via peripheral stimuli into the cerebrum showed no delay or abnormality of function (amplitude or latency) of the cerebral recorded somatosensory response. Neurophysiologic testing of the bulbocavernosus reflexes showed absolutely no motor responses (efferent limb) elicited. A manual bulbocavernosus reflex was carried out and again no motor (efferent) response was elicited.

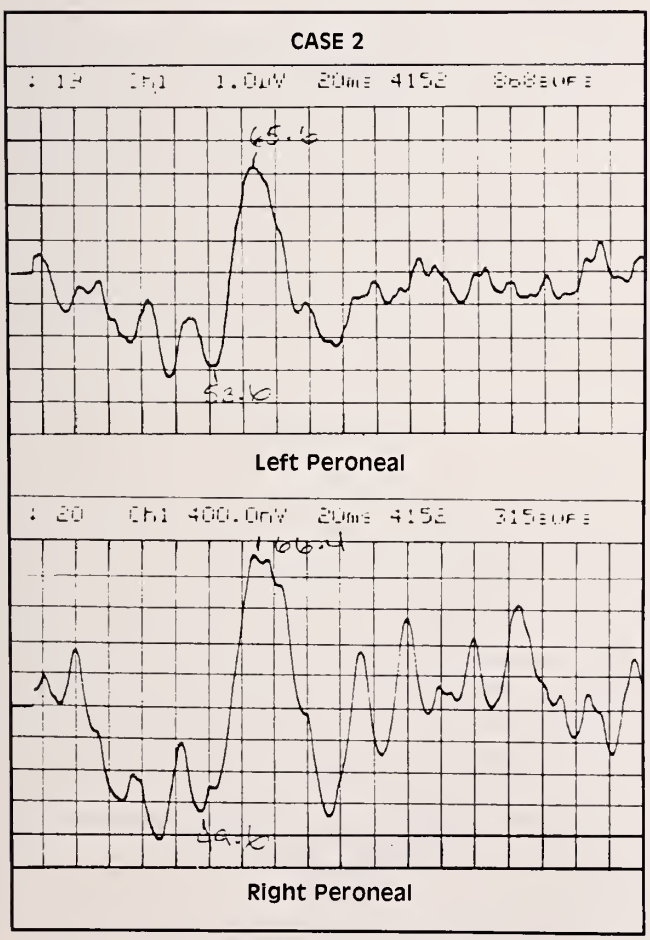
The diagnostic impression was an organic dysfunction based on motor (efferent) dysfunction secondary to diabetic motor neuropathy.

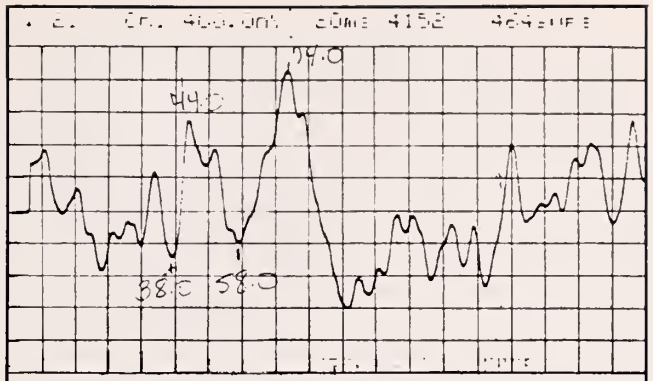


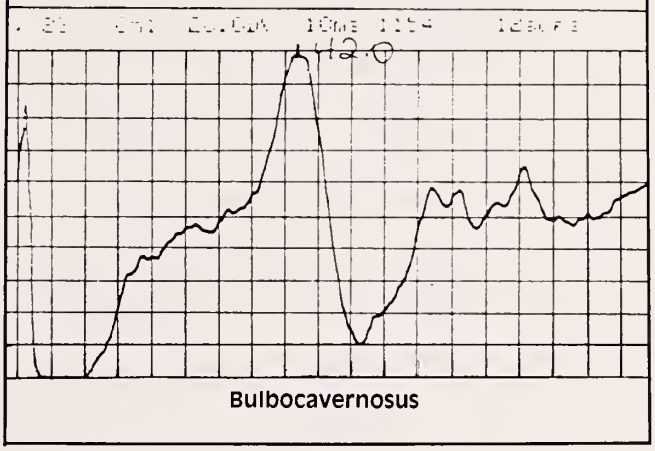


Pudendal

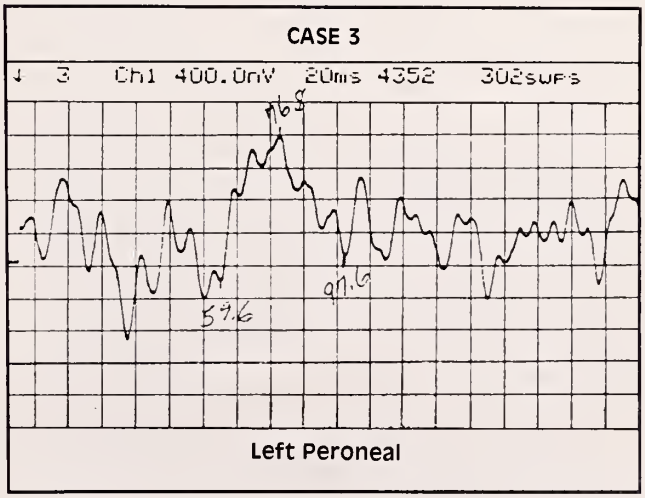
Case 2. — A 35-year-old male "workmen's compensation patient" had been injured four years previous to evaluation. Thoracodorsal back pain was the primary complaint; there were no abnormal findings in the lower extremity reflexes. Routine motor and sensory nerve conduction studies and H reflexes of the lower extremities were well within normal limits. The myelogram was negative for a structural lesion. The patient bitterly complained that his sexual performance had dropped from "once per day" just prior to injury to "once per month" since his injury. He had not been on tranquilizers, antidepressants or cholinergic or anticholinergic medications for any significant period of time. Neurological examination was well within normal limits. The cerebrally recorded common peroneals, pudendal evoked potential and bulbocavernosus peripheral responses were all well within the stated limits of normal in our electrodiagnostic battery of tests. The diagnostic impresion was that of a "functional disorder."

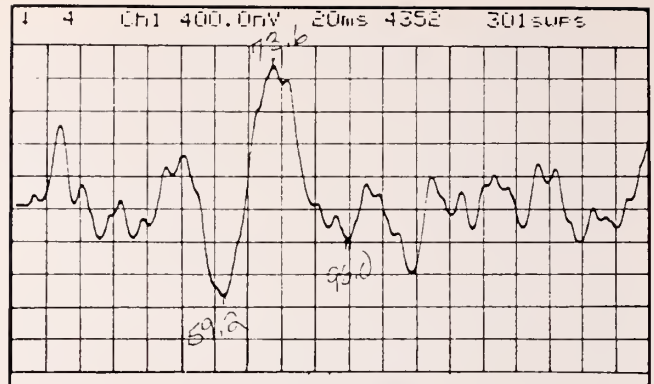




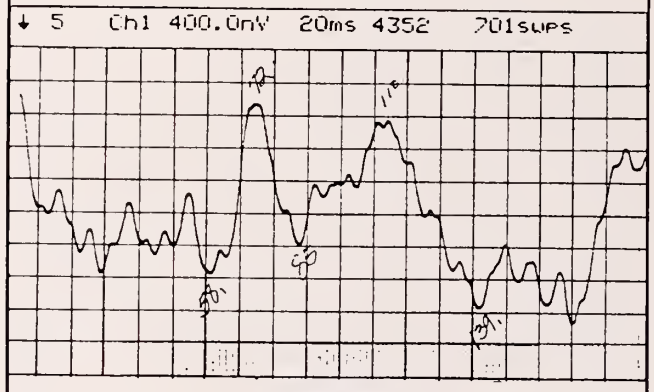


Case 3. — A 65-year-old male presented with some recent difficulties of bladder control, i.e. dribbling. Slight prostate hypertrophy was noted on initial examination but no history of prior urinary tract infection. Reflex examination was normal in the lower extremities as were the peroneal, posterior tibial motor, sensory sural nerve conduction velocity studies and H reflexes. A cystometrogram suggested a possible slight "spastic" bladder; video cystometrogram, however, suggested a mild atonic bladder. No loss of sexual function was historically identified. EMG and nerve conduction studies were normal. Cerebrally recorded peroneal, pudendal evoked responses and peripherally recorded bulbocavernosus electrodiagnostic studies were all within normal limits. The patient's symptoms cleared within three days without any treatment and he left the hospital without any genitourinary or sexual dysfunction. The diagnostic impression was that no progressive neurologic or functional disorder was present.

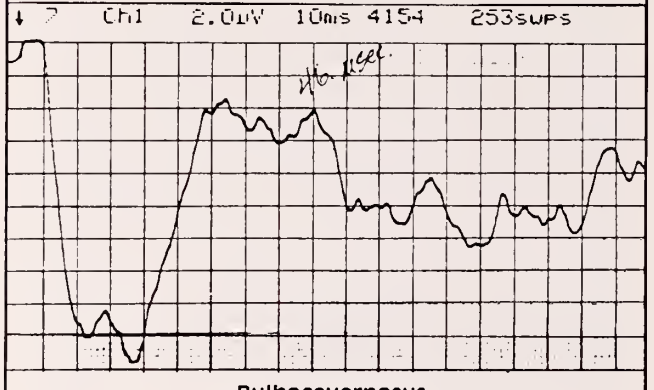




Right Peroneal



Pudendal

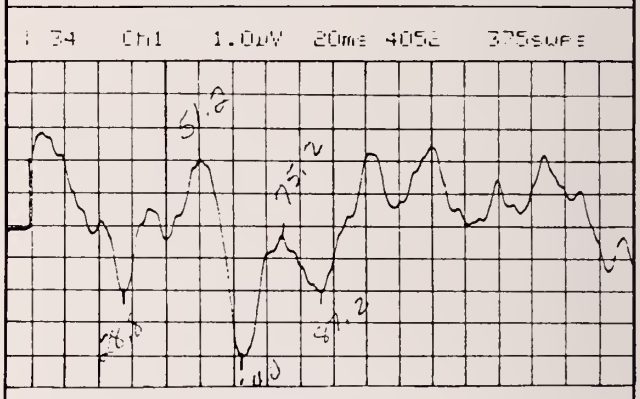


Bulbocavernosus

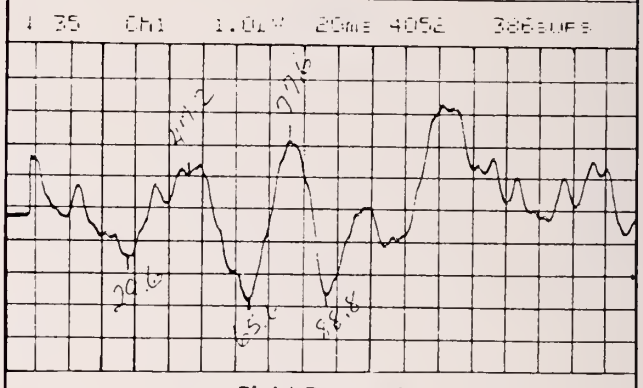
The remainder of the neurologic examination was within normal limits with the exception of optic palor on the left. Peroneal and pudendal nerve evoked cerebrally recorded responses were well within normal limits. The bulbocavernosus reflex was "fast;" recorded at half the expected normal value for females. This finding was considered suggestive of a possible "spastic" response.

The diagnostic impression was that this clinical situation represented a possibly spastic bladder. Cystometrogram confirmed this opinion. The patient is under clinical observation without any further exacerbations of neurologic dysfunction.

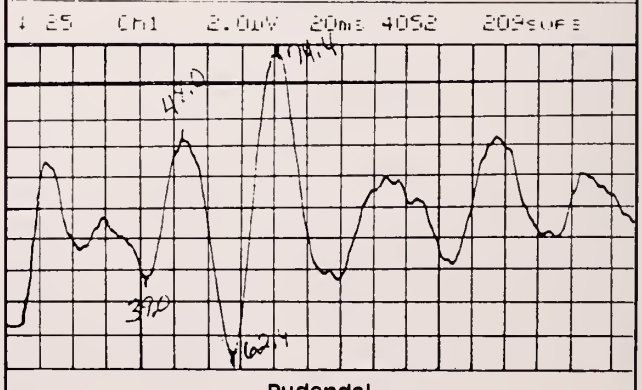
CASE 4



Left Peroneal



Right Peroneal

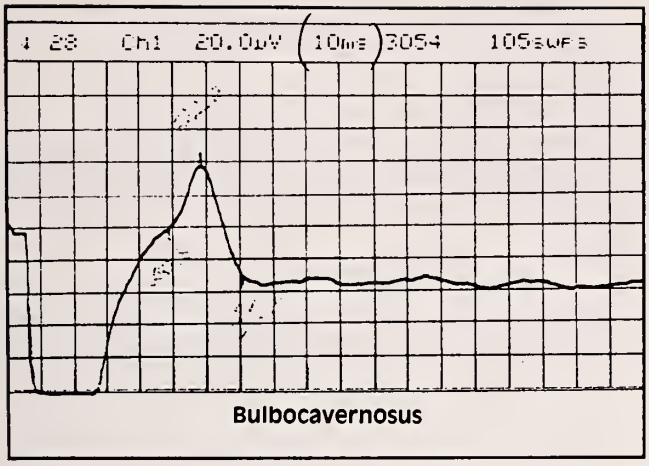


Pudendal

Case 4. — A 28-year-old married female with two children presented with a three day history of acute urinary retention. The patient's mother had a history of probable multiple sclerosis on the basis of a transitory paraparesis without any further exacerbation after the first remission some 14 years ago. The patient was congenitally blind in the left eye.

Lower extremity reflexes were within normal limits, no pathologic reflexes were noted and abdominal reflexes were not present. Motor and sensory nerve conduction studies were normal in the lower extremities along with normal H reflex times for her height.

Brain stem auditory evoked responses were within normal limits. Visual evoked responses showed clearly an (prolonged latency of P 100) abnormal function in the afflicted left eye.



Discussion • For almost 20 years, human somatosensory peripherally evoked and cerebrally recorded cortical potentials have been described. It is in relatively recent times that brain stem auditory evoked responses (BAER),[18] visual evoked responses (VER), and other somatosensory[19-21] evoked responses have come into common, everday clinical usage in diagnostic medicine.

These easily accomplished (cerebrally recorded) evoked potential recordings in trained hands have become a promising tool to the clinical neurophysiologist. It is without doubt that most practicing clinical neurologists today possess both the skills and equipment to perform these useful adjunctive procedures in the clinical evaluation of patients with sexual and genitourinary dysfunction.

References

1. Bors, E.H. and Comarr, K.A.: Neurological Disturbances of Sexual Function with Special Reference to S29 Patients with Spinal Cord Injury, Urol. Surg. 10:191-222, 1960.
2. Ertekin, C. and Reel, F.: Bulbocavernosus Reflex in Normal Men and in Patients with Neurogenic Bladder and/or Impotence, J. Neurol. Sci. 28.1-15, 1976.
3. Percy, J.P.; Swash, M., and Neill, M.E., et al: Electrophysiological Study of Motor Nerve Supply of Pelvic Floor, Lancet 1:16-17, 1980.
4. Dick, H.C.; Bradley, W.E., and Scott, F.B., et al: Pudendal Sexual Reflexes: Electrophysiologic Investigations, Urology 3:376-379, 1974.
5. Chautraine, A.; de Leval, J., and Onkelinx, A.: Motor Conduction Velocity in Internal Pudendal Nerves In Desmedt, J.E., ed: New Developments in Electromyography and Clinical Neurophysiology, Basel, Switzerland, S. Karger AG, 1973, vol 2, pp 433-438.
6. Jones, S.J. and Small, D.G.: Spinal and Subcortical Evoked Potentials Following Stimulation of Posterior Tibial Nerve in Man, Electroencephalogr. Clin. Neurophysiol. 44: 299-306, 1978.
7. Hume, A.L. and Cant, B.R.: Conduction Time in Central Somatosensory Pathways in Man, Electroencephalogr. Clin. Neurophysiol. 4S:361-375, 1978.
8. Delbeke, J.; McComas, A.J., and Kopec, S.J.: Analysis of Evoked Lumbosacral Potentials in Man, J. Neurol. Neurosurg. Psychiatry. 41:293-302, 1978.
9. Penfield, W. and Rasmussen, A.T.: Cerebral Cortex of Man: Clinical Study of Localization of Function, New York, Macmillan Publishing Co., Inc., 19S0.
10. Siroky, M.B.; Sax, D.S., and Krane, R.J.: Sacral Signal Tracing: Electrophysiology of Bulbcavernosus Reflex, J. Urol. 122: 661-664, 1979.
11. Bergamini, L.; Bergamasco, B., and Fra, L., et al: Somatosensory Evoked Cortical Potentials in Subjects with Peripheral Nerve Lesions, Electromyography S:121-130, 196S.
12. Desmedt, J.E. and Noel, P.: Averaged Cerebral Evoked Potential in Evaluation of Lesions of Sensory Nerves adn of the Somatosensory Pathways. In Desmedt, J.E., ed. New Developments in Electromyography and Clinical Neurophysiology, vol. 2, Basel, Karger 3S2-371, 1973.
13. Giblin, D.R.: Somatosensory Evoked Potentials in Healthy Subjects and in Patients with Lesions of Nervous System, Ann. N.Y. Acad. Sci. 112:93-142, 1964.
14. Halliday, A.M.: Clinical Applications of Evoked Potentials. In Matthews, W.B. and Gaser, G.H., eds: Recent Advances in Clinical Neurology, New York, Churchill Livingstone, 47-73, 1978.
15. Johnes, S.J.: Short Latency Potentials Recorded from Neck and Scalp Following Median Nerve Stimulation in Man, Electroencephalogr. Clin. Neurophysiol. 43:853-863, 1977.
16. Matthews, W.A.; Beauchamp, M., and Small, D.G.: Cervical Somatosensory Evoked Responses in Man, Nature 2S2:230-232, 1974.
17. Haldeman, S.; Bradley, W.E.; Bhatia, N.N., and Johnson, B.K.: Pudendal Evoked Responses, Arch. Neurol. 39:280-283, 1982.
18. Green, J., et al: Use of Brain Stem Auditory Potentials, Clinical EEG.
19. Bennett, M.H. and Jannetta, P.J.: Trigeminal Evoked Potentials in Humans, Electroencephalogr. Clin. Neurophysiol. 48:S17-526, 1980.
20. Stohr, M. and Petruch, F.: Somatosensory Evoked Potentials Following Stimulation of Trigeminal Nerve in Man, J. Neurol. 220:9S-98, 1979.
21. Singh, N., Sachdev, K.K., and Brisman, R.: Trigeminal Nerve Stimulation: Short Latency Somatosensory Evoked Potentials, Neurology 32:97-101, 1982.

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Amyloid heart disease: A cause of resistant congestive heart failure in the elderly

Dev Narayan, M.D., P.K. Mathew, M.D., Alvani D. Santos, M.D.

ABSTRACT: Amyloid deposits in heart and blood vessels are common in the elderly. Congestive heart failure is a usual mode of presentation and a frequent cause of death. A case is reported of amyloid heart disease. Recent advances are discribed in pathogenesis, clinical findings, echocardiographic and electrocardiographic features of cardiac amyloidosis. Special problems and treatment modalities are discussed.

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Cardiac amyloidosis accounts for 5-10% of all forms of isolated noncoronary cardiomyopathy.[1] Echocardiography is an invaluable noninvasive way to diagnose amyloidosis and typical features of two-dimensional (2-D) and M-mode findings have been described.[2 3] Unexplained congestive heart failure (CHF) in an older person with 2-D echocardiographic features of thickened right and left ventricular myocardium, normal or small left ventricular cavity, and diffuse hyperrefractile "granular sparkling" appearance should raise the possibility of amyloidosis as a cause of CHF.

Case report • An 84-year-old white male was admitted with progressive shortness of breath for six months. He had also noted swelling of the feet, especially in the evening, for two months which had become persistent three weeks prior to admission. There was no chest pain or palpitations. He denied smoking and drinking. There was no history of hypertension, myocardial infarction, diabetes, rheumatic fever or thyroid disease.

Three years previously he had been treated with digoxin and diuretics for "CHF" by a family physician. After a few weeks he discontinued all medications and was lost to further follow-up.

Physical examination showed an alert and oriented man having mild orthopnea. Pulse was 80/minute and regular, temperature normal, respirations 26/minute and blood pressure 120/80 mmHg with no postural change. There was no icterus. Thyroid was unremarkable. Jugular venous pressure was 5 cm. at 45°. Cardiac apex was not felt. S_1 and S_2 were normal. There was an S_3 and S_4 gallop in the mitral area with a grade II/VI ejection systolic murmur heard at the lower sternal border. Stony dullness and diminished breath sounds were noted

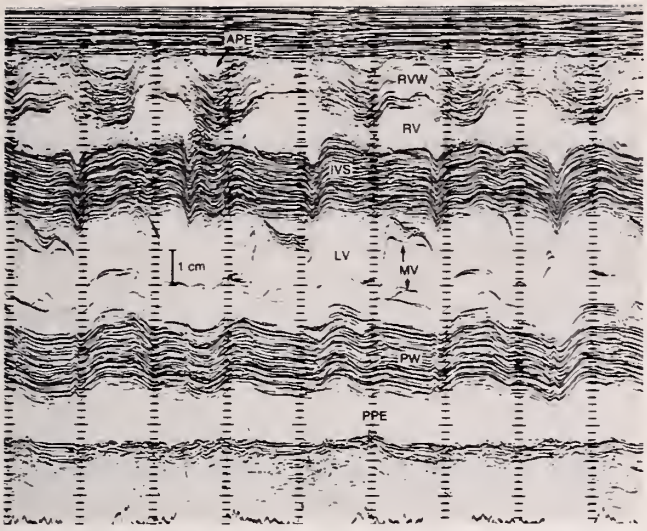


Fig. 1—M-mode echocardiogram of ventricles. All cardiac walls are thickened. Note hypokinesis of interventricular septum (IVS) and posterior wall (PW), thickened mitral valves (MV), normal left ventricular cavity (LV), anterior pericardial effucion (APE) and posterior pericardial effucsion (PPE). RW = right ventricular cavity.

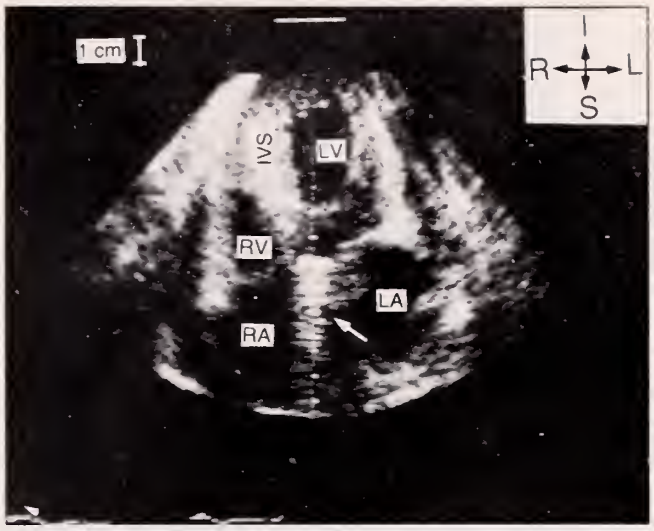


Fig. 2—Two-dimensional echocardiographic examination. Apical four chamber view of the heart is displayed. Note hyperrefractile "granular sparkling" appearance of wall. Arrow indicates thickened interatrial septum. RA = right atrium. LA = left atrium. RV = right ventricular cavity. LA = left ventricular cavity. IVS = interventricular septum. R = right. L = left. I = inferior. S = superior.

over both lung bases. The liver was palpable 10 cm below the costal margin, smooth and nontender. The spleen was not palpable. Bilateral pitting leg edema extending above the ankles was noted.

Relevant laboratory data showed hemoglobin 10.5 gm%, hematocrit 33%, normal leukocyte count, differential and platelets. Blood chemistry showed normal electrolytes and glucose. Blood urea nitrogen was 36 mg/dl, serum creatinine 1.5 mg/dl, total serum protein 5.6 gm/dl with a normal electrophoretic pattern, albumin 2.1 gm/dl, calcium, phosphorus and alkaline phosphatase normal, and cardiac enzymes were normal on serial measurements (SGOT, LDH and CPK). Serum uric acid and bilirubin were normal. Urinalysis showed 4+ proteinuria and no Bence Jones protein. A 24-hour urine collection for proteins on two occasions revealed 2.1 and 1.8 gm with a urine volume of 1010 and 1310 ml respectively. Creatinine clearance was 12 me/minute. T3, T4 and TSH were normal.

Chest x-ray showed mild cardiomegaly, bilateral pleural effusions and pulmonary congestion.

EKG revealed sinus rhythm, first degree AV block and left bundle branch block.

Echocardiography showed a relatively small left ventricular cavity with generally decreased wall motions and concentric hypertrophy, hypertrophy of the septum and right ventricular wall, moderately dilated left atrium and a posterior pericardial effusion. There was hyperrefractile "granular sparkling" of the left ventricle, septum and right ventricle. A similar appearance and hypertrophy were also noted in the interatrial septum. There was no obstruction to the left ventricular outflow tract or aortic valvular stenosis. The mitral and tricuspid valves were thickened. The echocardiographic pattern suggested infiltrative cardiomyopathy and the possibility of amyloid heart disease (Figs. 1-3).

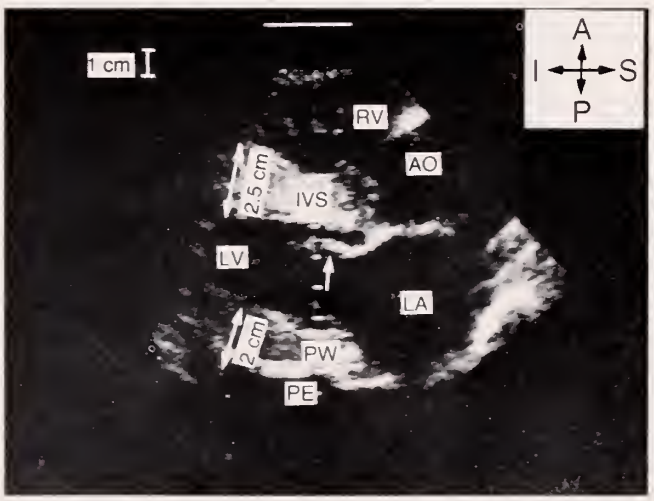


Fig. 3—Two-dimensional echocardiographic examination. Modified parasternal long axis view of heart is shown. Note thickened interventricular septum (IVS = 2.5 cm) and posterior wall (PW = 2 cm), normal left ventricular cavity (LV) and pericardial effusion (PE). Arrow indicates thickened anterior mitral valve. LA = dilated left atrium (5 cm). AO = aorta. RV = right ventricular cavity. A = anterior. P = posterior. I = inferior. S = superior.

Rectal biopsy with Congo red stain showed areas of positive staining and yellow-green birefringence under polarized light diagnostic of amyloidosis[4] (Fig. 4).

The patient was treated with diuretics and showed some initial improvement. After discharge symptoms progressed with a rise in BUN to 216 mg/dl, creatinine to 17.7 mg/dl, P to 89 mg/dl and Mg to 2.7 mEq/l, increasing heart failure and acidosis. He died eight months after initial diagnosis. Permission for autopsy was not granted.

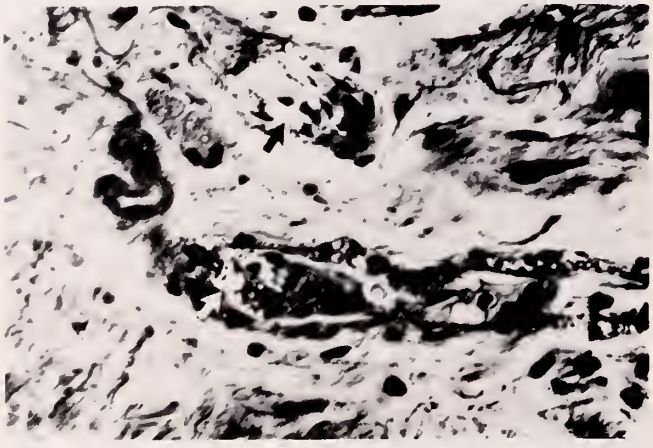


Fig. 4—Rectal biospy. Arrow indicates birefringent amyloid deposits on wall of submucosal blood vessels. (Congo Red Stain x100, polarized light.)

Discussion • The clinical picture of refractory congestive heart failure and associated impaired renal function in the absence of previous ischemic, valvular or hypertensive heart disease is highly suggestive of a cardiomyopathy. The echocardiographic features are characteristic of amyloid heart disease with notable absence of obstruction to the left ventricular outflow tract. Rectal biopsy was prompted by the combined clinical and echocardiographic findings and confirmed the diagnosis of amyloidosis. Therefore further invasive diagnostic workup such as endomyocardial biopsy and cardiac catheterization was considered unnecessary.

Onset of transient CHF three years prior to diagnosis reflects the insidious onset and slow progression of the disease as observed in other studies.[5] However, mean survival after diagnosis is usually 1.4 years whereas in our patient it was only eight months.[6]

Pathology and Pathogenesis • Until recently amyloid was considered a homogenous eosinophilic material of diffuse origin but several studies conclusively demonstrated that amyloid is a febril having aunique twisted beta pleated sheet structure.[4,7,8] It is an extracellular material and fibrils are composed of mainly two types of proteins either singly or in combination. Primary amyloid is composed of immunoglobulin light chains called amyloid light chain (AL) protein. In secondary amyloidosis and familial forms (familial Mediterranean fever), there is an overproduction of amyloid protein (AA) and it appears to derive from an antigenically related larger serum protein component, serum amyloid A related protein (SAA). SAA is produced in response to B-lymphocyte stimulation; impaired function of T-lymphocyte or immune dysfunction may have an important role in amyloidogenesis.[4] In addition, genetic and individual factors may also play a part in pathogenesis.

With increase in age, there is a rise in serum SAA. In the 8th and 9th decades, levels are ten times greater than during the first five decades.[9] It is also increased in chronic inflammatory conditions. Senile cardiac amyloidosis is a primary form of amyloidosis with characteristic age distribution and immunologically distinct amyloid protein component.[10,11]

Several classifications of amyloidosis have been made but none are satisfactory.[6,12] Based on etiology and biochemical nature of constituent proteins, a simpler classification was suggested by Cohen and Wegelius.[13] A clinical pathologic differentiation has been attempted recently by Wright and Calkins.[14]

Diagnosis • Amyloid heart disease has no pathognomonic clinical diagnostic features. Moreover, it may mimic ischemic heart disease, constrictive pericarditis, pericardial effusion and different forms of cardiomyopathy. CHF is a common mode of presentation and a frequent cause of death.[6] Positive diagnosis of cardiac amyloidosis can be achieved only by histopathological demonstration of amyloid deposits in th eheart. Until recently this was possible only by means of postmortem examinations. Techniques of myocardial biopsy and 2-D echocardiographic findings have improved the diagnostic ability. Rectal biopsy is a simple procedure and affords an excellent diagnostic yield for histological confirmation because of the multiple systemic infiltrative nature of the disease.[6]

Cardiac involvement • Soyka described senile cardiac amyloidosis for the first time in 1876.[15] The cardiovascular system in the elderly is the most common site of amyloid deposit excluding the central nervous system. The reported overall incidence is 2% and it increases to 50% after age 90.[16,17] Hodkinson and Pomerance found no amyloid deposits in patients under age 65 but 84% over age 90 had at least minor atrial deposits and half of them had ventricular deposits as well.[11] Surprisingly, this condition seems less common in centenarians.[18] In senile cardiac amyloidosis, amyloid deposits occur

in the atria, ventricles, valves, conduction system and pericardium as well as the aortopulmonary tree. Cardiac hypertrophy and fibrosis are accompanying features. The greatest amount of amyloid is found in the myocardium of the atria and ventricles. The degree of involvement is seldom uniform and the mechanism of deposit is unknown. It tends to be located around myocardial cells and they are gradually replaced by amyloid fibrils. Similar changes in the conduction system may cause cardiac arrhythmia, heart block and sudden death. However Ridolfi et al in an autopsy study of 23 patients found amyloid deposits in the conduction system of only three patients; all of them showed first degree atrioventricular block and left anterior hemiblock.[19] Fibrosis of the sinoatrial node (30%) and less commonly atrophy and fibrosis of bundle branches were also noted (26%). But direct amyloid infiltration of the specialized conduction system as a cause of cardiac arrhythmia has been disputed and the mechanism is less clear. The affected myocardium displays a stiffness and lack of compliance giving rise to restrictive meopathy and reduced ventricular filling which insidiously progresses into CHF. Coronary artery narrowing due to amyloid deposit has been reported and may lead to myocardial infarction.[20] One or more cardiac valves may show amyloid deposits and the affected valve has a waxy glistening appearance. However Buja et al did not find valvular impairment in a series of 15 cases of clinically significant cardiac amyloidosis.[20] This is probably due to preferential deposition on cardiac musculature leading to atrial, ventricular and conduction system disturbances causing death before valvular dysfunction can manifest.

Amyloid involvement primarily of the thoracic aorta has been found in 53% to 79% of autopsied patients. Its incidence increases with age and the extent and dysfunction appears unrelated to atherosclerosis.[21]

Cardiac amyloidosis may occur without significant heart disease. This term implies mere deposition of amyloid material in the heart; whereas, amyloid heart disease signifies the clinical syndrome of heart disease associated with amyloid deposit in the heart and blood vessels.

Clinical features • CHF is the most common presentation and most patients have been over age 50.[6] Both sexes are affected. Heart failure develops insidiously. There may be weakness, lightheadedness or syncopal episodes. It mimics constrictive pericarditis and restrictive cardiomyopathy, clinically and hemodynamically.[22] Hypertension has been reported in 30% of cases. Postural hypotension occurs in 16% of primary amyloidosis due to extensive involvement in sympathetic ganglia, nerves and adrenals.[23] Refractory cardiac arrhythmias and heart block are common.[5,19] Ischemic heart disease with aginal syndrome may be simulated and confusion may occur with pseudinfraction patterm on ECG.[20] Nodular amyloid deposits on valves and papillary muscles may cause valvular dysfunction. Mural thrombi may lead to systemic and pulmonary embolism. Involvement of the kidneys is extremely common and is one of the major causes of death. Nephrotic sysdrome due to amyloid deposit was found in 32% and renal insufficiency in 50% of cases at the time of diagnosis.[6] In later stages of the disease, cardiomegaly may be present, and pericardial effusion is usual (58%).[2]

Digitalis sensitivity has been reported in cardiac amyloidosis.[5] Rubinow et al have recently shown increased binding of digoxin to amyloid fibrils and heart.[24] This may be particularly inportant in treating cardiac arrhythmias and CHF that commonly occur in cardiac amyloidsis.

Electrocardiogram • The ECG is generally abnormal but there are no specific features. Low voltage QRS complexes in standard and extremity leads are most commonly described. In addition, conduction disturbances, heart block and atrial arrhythmias also freguently occur. However Buja et al in a review of 339 cases (333 autopsies) found low voltage in 50%, left axix deviation in 59%, right axis deviation in 7% and myocardial infarction pattern (Q in II, III, AVF and small or absent R from V1-3) in 54%.[20] Low voltage may be obscured by complete bundle branch block.[25]

Echocardiography • M-mode and 2-D echocardiographic features of amyloidosis have been well described.[2,3] Thickened right and left ventricular walls as well as septum having a hyperrefractile "granular sparkling" appearance on 2-D examination, normal or small left ventricular cavity with decreased wall motions, and mildly enlarged atria are diagnostic features. A similar "granular sparkling" appearance has been described in other infiltrative cardiomyopathy.[26] However such findings in an older person with unexplained CHF are almost diagnostic of senile cardiac amyloidosis. Thickened papillary muscles and valves, better definition of right ventricular wall and pericardial effusion are additional 2-D echocardiographic features.[2]

Treatment • So far there is no specific therapy for amyloidosis. The aims of treatment are to prevent further deposit of amyloid material and to promote its resorption. Present concepts of amyloidogenesis suggest that phagocytic cells are involved in resorption of amyloid fibrils as well as in their deposition. An equilibrium is believed to exist between synthesis and dissolution of deposits. In secondary

amyloidosis, treatment is aimed at control of underlying disease. Amyloidosis secondary to myeloma may respond to cytotoxic drugs.[4,27] Amyloidosis secondary to familital Mediterranean fever has been treated with colchicine and renal amyloidosis has been shown to respond to dimethylsulfoxide (DMSO), a treatment still in the experimental stage.[28,30]

Treatment of CHF in amyloid heart disease is discouraging because of global cardiac dysfunction coupled with the progressive pathologic process. The often associated renal failure, hepatic and pulmonary involvement further complicate the issue and the diagnosis may remain unsuspected until the disease is far advanced with multisystem involvement. Digitalis is relatively contraindicated due to increased incidence of arrhythmia and digitalis sensitivity.[5,24] Diuretics may cause dehydration and postural hypotension and may aggravate renal failure. They should be used cautiously. Early diagnosis can aid management, especially in the elderly, avoiding unnecessary and costly diagnostic workyp. Recent success in the management of renal amlyoidosis using dimethylsulfoxide and calcium blocking agents or vasodilators may open new avenues in symptomatic management of heart failure, but these require further study.

Prognosis ● Prognosis is poor. Median survival was 1.4 years after histological diagnosis in 193 cases of primary amyloidosis and it is four months in amyloidosis with myeloma.[6] This is because of delay in diagnosis, and presumptive evidence of cardiac amyloidosis is often present for years before diagnosis is proved in the case of amyloidosis in elderly.

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References

1. Brigden, W.: Cardiac Amyloidosis, Progr Cardiovasc. Dis 7:142-150, 1964
2. Siqueira-Filho, A.G.; Cunha, C.L.P.; Tajik, A.J.; Seward, J.B.; Schattenberg, T.T., and Guiliani ER. M-mode and Two-dimensional Echocardiographic Features in Cardiac Amyloidosis, Circulation 63:188-196, 1981
3. Feigenbaum, H.: Echocardiography, 3rd Ed., Lea and Febiger, Philadelphia, pgs. 470-472, 1981
4. Glenner, G.G.: Amyloid Deposits and Amyloidosis: the B-fibrilloses, N. Engl. J. Med 302:1283-1291, 1333-1343, 1980.
5. Brandt, K., Cathcart, E.S., and Cohen, A.S.: Clinical Analysis of Course and Prognosis of Forty-two Patients with Amyloidosis, Am. J Med. 44:955-969, 1968.
6. Kyle, R.A. and Bayrd, E.D.: Amyloidosis: Review of 236 Cases, Medicine 54 271-299, 1975
7. Eanes, E.D. and Glenner, G.G.: X-ray Diffraction Studies of Amyloid Filaments, J. Histochem, Cytochem, 16:673-677, 1968
8. Bonar, L.; Cohen, A.S., and Skinner, M.M.: Characterization of Amyloid Fibril as Cross-B Protein, Proc. Soc. Exp. Biol. Med 131:1371-1375. 1969.
9. Rosenthal, C.H. and Franklin, E.C.: Variation with Age and Disease of Amyloid A Protein-related Serum Component J Clin. Inves. 55:746:753, 1975.
10. Pomerance, A Cardiac Pathology in Elderly, Cardiovasc. Clin. 12:9-54, 1981.
11. Hodkinson, H.M and Pomerance, A.: Clinical Significance of Senile Cardiac Amyloidosis: Prospective Clinicopathological Study, Quart. J. Med. (new series) 46:381-387, 1977.
12. Isobe, T and Osserman, E.F.: Patterns of Amyloidosis and Their Association with Plasma-cell dyscrasia, Monoclonal Immunoglobulins and Bence-Jones Proteins, N Engl. J. Med. 290:473-477, 1974.
13. Cohen, A.S and Wegelius, O.: Classification of Amyloid: 1979-1980, Arth. Rheum 23:644-645, 1980.
14. Wright, J.R. and Calkins, E.: Clinical-pathologic Differentiation of Common Amyloid Syndromes, Medicine 60:429-448, 1981.
15. Soyka, J.: Veber Amyloid Degeneration, Prager Med. Woehenschr. 1:165, 1876.
16. Cornwell, G.G. III; Natvig, J.B.; Westermark, P., and Husby, G.: Senile Cardiac Amyloid: Demonstration of Unique Fibril Protein in Sections, J. Immunol. 120:1385-1388, 1978
17. Bueger, L. and Braunstein, H.: Senile Cardiac Amyloidosis, Am J. Med. 28:357-367, 1960.
18. Ishii, T and Sternby, N.J.: Pathology of Centenarians. The Cardiovascular System and Lungs, J. Am. Geriat. Soc. 28:108, 1978.
19. Ridolfi, R.L.; Bulkley, B.H., and Hutchins, G.M.: Conduction System in Cardiac Amyloidosis: Clinical and Pathologic Features of 23 Patients, Am. J. Med. 62.677-686, 1977.
20. Buja, L.M.; Khoi, N.B., and Roberts, W.C.: Clinically Significant Cardiac Amyloidosis Clinicopathological Findings in 15 Patients, Am. J. Cardiol. 26:394-405, 1970.
21. Wright, J.R. and Calkins, E.: Relationship of Amyloid Deposits in Juman Aorta to Aortic Atherosclerosis: Postmortem Study of 100 Individuals over 60 Years of Age, Lab. Invest. 30:767-773, 1974
22. Meaney, E.; Shabetai, R.; Bhargava, V.; Shearer, M.; weider, C.; Mangiardi, L.M.; Smalling, R., and Peterson, K.: Cardiac Amyloidosis, Constructive Pericarditis and Restrictive Cardiomyopathy. Am. J. Cardiol. 38:547-556, 1976.
23. Caan, D.; Mahoney, M.P.; Rowlands, D.J., and Jones, A.W.: Postural Hypotension in Amyloid Disease, Am. Heart. J. 84 395, 1972.
24. Rubinow, A.; Skinner, M., and Cohen, A.S.: Digoxin Sensitivity in Amyloid Cardiomyopathy, Circulation 63:1285-1288, 1981.
25. Garcia, R. and Saeed, S.M.: Amyloidosis: Cardiovascular Manifestations in Five Illustrative Cases, Arch. Intern. Med. (Chicago) 121:259-266, 1968.
26. Bhandari, A and Nanda, N.C.: Two-dimensional Echocardiographic Characterization of Myocardial Texture: Nonspecificity in Amyloidosis, Circulation 64 IV-313, 1981.
27. Buxbaum, J.N.; Hurley, M.E.; Chuba, J., and Spiro, T.: Amyloidosis of AL Type. Clinical Morphologic and Biochemical Aspects of Response to Therapy with Alkylating Agents and Prednisone, Am. J. Med. 67:867-878, 1979.
28. Goldfinger, W.E.: Colchicine for Familial Mediterranean Fever, N. Eng. J. Med 287:1302, 1972.
29. Ravid, M.; Robson, M., and Keizman, I.K.: Prolonged Colchicine Treatment in Four Patients with Amyloidosis Ann. Intern. Med. 87:568-570, 1977.
30. Ravid, M.; Keizman, I.K., and Sohar, E.: Effect of Single Dose of Dimethylsulphoxide on Renal Amyloidosis, Lancet 1:730-731, 1977.

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Real-time ultrasonic demonstration of a partially reducing incarcerated ventral hernia

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ABSTRACT: In an emergency setting, real-time ultrasound provided a diagnostic picture of a reducing incarcerated hernia in an obese woman. Portable real-time ultrasonography offers a prompt adjunct to confusing emergent abdominal presentations.

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Ultrasonography has been found of great value in diagnosing unusual defects of the abdominal wall.[1] This paper presents a case where portable real-time ultrasound provided highly specific visualization of a partially reducing incarcerated ventral hernia, a circumstance not previously reported.

Case report • A 62-year-old markedly obese black female presented to the emergency room complaining of abdominal pain. Six hours prior to arrival she had eaten and promptly experienced sharp, cramping epigastric and right upper quadrant pain. A single bilious emesis relieved her initial pain but provoked a duller pain above her umbilicus. This latter pain progressed and led her to seek medical attention.

At examination, the patient complained of constant, supraumbilical pain; her abdomen was markedly obese. Palpation revealed a poorly defined, firm area of tenderness above her umbilicus.

Laboratory studies showed a slightly elevated serum amylase and were otherwise normal. Chest and abdominal x-rays were not helpful.

A portable real-time ultrasound examination was performed in the emergency room using a A.T.L. Model 850-A with a 3.0 Mhz transducer. Transverse scanning in the area of tenderness showed widening of the preperitoneal soft tissue and a sausage-shaped segment of tissue above the abdominal wall musculature (Fig. 1). Peristalsis was clearly observed, identifying the tissue as bowel. During examination, the incarcerated bowel reduced through a defect in the midline (Fig. 2) leaving a sac with anechoic contents (Fig. 3).

The patient was taken to surgery from the emergency room and explored through a midline incision. A hernia sac containing edematous omentum was found protruding through a 1.5 cm defect 4 cm above the umbilicus. Abdominal exploration disclosed 6 cm of injured jejunum exhibiting seromuscular ecchymosis and fibrinous serous inflammation consistent with prior incarceration. Doppler examination showed intact antimesenteric pulsation and peristalsis was observed through the damaged segment; it was not resected.



Fig. 1. — Hernia sac (HS) and incarcerated bowel (B) above the linea alba.



Fig. 2. — Bowel (B) reducing through a midline defect (D).

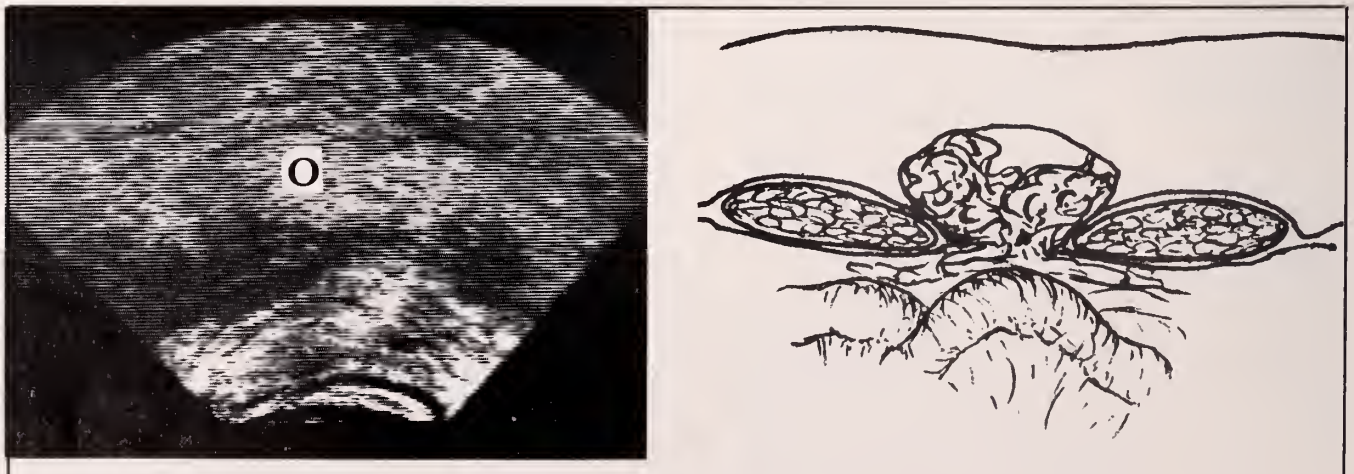


Fig. 3. — Persistent anechoic incarceration (O), which later proved to be omentum.

The gallbladder was found to have a single large stone. Cholecystectomy was performed, a normal cholangiogram was obtained, and the hernia defect was repaired in a single layer midline closure.

Discussion • Optimal management of incarcerated hernias mandates prompt recognition of visceral entrapment followed by surgical correction prior to intestinal infarction. Fortunately, most abdominal wall defects are readily diagnosed by physical examination; however, in unusual presentations, and in the obese abdomen, ultrasound has proven to be a valuable, reliable adjunct.

First specifically applied to abdominal wall defects by Spangen in 1975,[2,3] ultrasound has been shown to be useful in anatomic and incisional hernias,[4,6] abdominal wall tumors,[6,7] hematomas,[8] and abscesses.[9]

In this patient, real-time ultrasound was able to depict an incarcerated hernia when physical examination was obscured by obesity. Observation of peristalsis aided in recognition of incarcerated bowel. The findings of persistent omental incarceration and reduction of incarcerated small bowel specifically directed surgical exploration to the hernia sac and to examination of the intestine.

This case illustrates the detail and specificity possible in real-time ultrasonic abdominal wall examination. Ultrasound should be considered as an extension of the physical examination in confusing problems of the obese or otherwise atypical abdomen and readily utilized in such circumstances.

References

1. Deitch, E.A and Engel, J.M.: Ultrasonic Diagnosis of Anterior Abdominal Wall, Surg Gynecol. Obstet. 151:484-486, 1980.
2. Spangen, L.: Ultrasound as Diagnostic Aid in Ventral Abdominal Hernia, JCU 3:211-213, 1975.
3. Spangen, L.: Spigelian Hernia, Acta Chir. Scand. Suppl. 462:28-31, 1976.
4. Deitch, E.A. and Soncrant, M.C.: Value of Ultrasound in Diagnosis of Nonpalpable Femoral Hernias, Arch Surg 116:185-187, 1981.
5. Nelson, R.L.; Renigers, S.A.; Byhus, L.M.; Sigel, B. and Spigos, D.G.: Ultrasonography of Abdominal Wall in Diagnosis of Spigelian Hernia, Am. Surg. 46:373-376, 1980.
6. Thomas, J.L. and Cunningham, J.J.: Ultrasonic Evaluation of Ventral Hernias Disguised as Intra-abdominal Neoplasms, Arch. Surg. 113:589-590, 1978.
7. Engel, J.M. and Deitch, E.A.: Sonography of Anterior Abdominal Wall, AJR 137:73-77, 1981
8. Fried, A.M and Meeker, W.R.: Incarcerated Spigelian Hernia: Ultrasonic Differential Diagnosis, AJR 133:107-110, 1979
9. Deitch, E.A. and Soncrant, M.C.: Ultrasonic Diagnosis of Surgical Disease of Inguinal-Femoral Region, Surg. Gynecol. Obstet. 152:319-322, 1981.

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Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, impending or acute delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in: relief of skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome. *Oral forms* may be used adjunctively in convulsive disorders, but not as sole therapy. *Injectable form* may also be used adjunctively in: status epilepticus; severe recurrent seizures; tetanus; anxiety, tension or acute stress reactions prior to endoscopic/surgical procedures; cardioversion.

The effectiveness of diazepam in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindications: Tablets or capsules in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

> *Usage in Pregnancy:* **Use of minor tranquilizers during first trimester should almost always be avoided because their use is rarely a matter of urgency and because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

ORAL Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral forms adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

INJECTABLE *To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling and, rarely, vascular impairment when used I.V.: inject slowly, taking at least one minute for each 5 mg (1 ml) given; do not use small veins,* i.e., *dorsum of hand or wrist, use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Injectable Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.*

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest; concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea; have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence; can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of diazepam, *i.e.*, phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed and tolerated).

The clearance of diazepam and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

INJECTABLE Although promptly controlled, seizures may return; readminister if necessary; not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures; use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated.

Adverse Reactions: Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, observed in patients during and after diazepam therapy are of no known significance.

INJECTABLE Venous thrombosis/phlebitis at injection site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia.

In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

Dosage: Individualize for maximum beneficial effect.

ORAL *Adults:* Anxiety disorders, relief of symptoms of anxiety—Valium (diazepam/Roche) tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 Valrelease capsules (15 to 30 mg) daily. Acute alcohol withdrawal—tablets, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; or 2 capsules (30 mg) the first 24 hours, then 1 capsule (15 mg) daily as needed. Adjunctively in skeletal muscle spasm—tablets, 2 to 10 mg t.i.d. or q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily. Adjunctively in convulsive disorders—tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily.

Geriatric or debilitated patients: Tablets—2 to 2½ mg 1 or 2 times daily initially, increasing as needed and tolerated (see Precautions). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose.

Children: Tablets—1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use in children under 6 months). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose (not for use in children under 6 months).

INJECTABLE Usual initial dose in older children and adults is 2 to 20 mg I.M. or I.V., depending on indication and severity. Larger doses may be required in some conditions (tetanus). In acute conditions injection may be repeated within 1 hour, although interval of 3 to 4 hours is usually satisfactory. Lower doses (usually 2 to 5 mg) with slow dosage increase for elderly or debilitated patients and when sedative drugs are added. (See Warnings and Adverse Reactions.)

For dosages in infants and children see below; have resuscitative facilities available.

I.M. use: by deep injection into the muscle.

I.V. use: inject slowly, take at least one minute for each 5 mg (1 ml) given. Do not use small veins, i.e., *dorsum of hand or wrist. Use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.*

Moderate anxiety disorders and symptoms of anxiety, 2 to 5 mg I.M. or I.V., and severe anxiety disorders and symptoms of anxiety, 5 to 10 mg I.M. or I.V., repeat in 3 to 4 hours if necessary; acute alcohol withdrawal, 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary. Muscle spasm, in adults, 5 to 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary (tetanus may require larger doses); in children *administer I.V. slowly*; for tetanus in infants over 30 days of age, 1 to 2 mg I.M. or I.V., repeat every 3 to 4 hours if necessary; in children 5 years or older, 5 to 10 mg repeated every 3 to 4 hours as needed. Respiratory assistance should be available.

Status epilepticus, severe recurrent convulsive seizures (I.V. route preferred), 5 to 10 mg adult dose administered slowly; repeat at 10- to 15-minute intervals up to 30 mg maximum. Repeat in 2 to 4 hours if necessary, keeping in mind possibility of residual active metabolites. Use caution in presence of chronic lung disease or unstable cardiovascular status. Infants (over 30 days) and children (under 5 years), 0.2 to 0.5 mg slowly every 2 to 5 min., up to 5 mg (I.V. preferred). Children 5 years plus, 1 mg every 2 to 5 min., up to 10 mg (slow I.V. preferred); repeat in 2 to 4 hours if needed. EEG monitoring may be helpful.

In endoscopic procedures, titrate I.V. dosage to desired sedative response, generally 10 mg or less but up to 20 mg (if narcotics are omitted) immediately prior to procedure; if I.V. cannot be used, 5 to 10 mg I.M. approximately 30 minutes prior to procedure. As preoperative medication, 10 mg I.M.; in cardioversion, 5 to 15 mg I.V. within 5 to 10 minutes prior to procedure. Once acute symptomatology has been properly controlled with injectable form, patient may be placed on oral form if further treatment is required.

Management of Overdosage: Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure; employ general supportive measures, I.V. fluids, adequate airway. Use levarterenol or metaraminol for hypotension. Dialysis is of limited value.

How Supplied:

ORAL Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100 and 500; Prescription Paks of 50, available in trays of 10; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25 and in boxes containing 10 strips of 10.

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SPECIAL ARTICLE

A survey on effects of malpractice insurance premiums on delivery of health care in family practice

Guy T. Selander, M.D.

This article, authored by Guy T. Selander, M.D., President of the Florida Academy of Family Physicians, regarding the survey of current medical practices among family physicians, is another clear indication of the effect that the threat of medical malpractice suits is having on Florida physicians.

This survey, along with a similar one by the President of the Florida Obstetric and Gynecologic Society previously published in the April 1983 issue of *The Journal of the Florida Medical Association*, leaves no doubt that the availability of health care for Florida residents is being seriously affected. Only meaningful tort reforms can reverse this trend of physicians limiting their practice, thus deleting the more hazardous procedures, as well as the expensive practice of defensive medicine.

James W. Walker, M.D.
President, PIMCO

This survey was conducted in April and May of 1983 by the Florida Academy of Family Physicians in order to determine the effects of medical malpractice insurance premiums on the delivery of health care in Family Practice. The results reveal that family physicians are curtailing their services as a direct result of the current medical malpractice crisis. Forty-four percent of the responding physicians will cease their obstetrical services, an area which is already being limited by the obstetrical specialists, and 30 percent will discontinue hospital surgery. In addition, the physicians pointed out that hundreds of additional dollars are being spent on x-rays, laboratory studies and extra days of hospitalization and consultations as a result of this problem.

Ninety-eight percent of the respondents to the survey said they are insured for professional liability. Of those who said they are not, 75 percent said it was because premiums are too high.

This survey indicates that the current professional liability problem is having an adverse effect on the practice of Family Medicine and on the availability and affordability of health care to the citizens of Florida.

The Author
GUY T. SELANDER, M.D.
Dr. Selander is President of the Florida Academy of Family Physicians, and practices in Jacksonville.

Overview • This survey was conducted by the Florida Academy of Family Physicians to examine the effects of malpractice insurance premiums on the delivery of health care in Family Practice via a mailed questionnaire. The results of the questionnaire survey are summarized in this report.

Methods • The data presented here was collected in a mail questionnaire survey of the active members of the Florida Academy of Family Physicians. Surveys were mailed on April 15, 1983. Responses received through May 18, 1983 are summarized.

Of the 1,073 questionnaires mailed, 497 were returned, a 46 percent response rate.

The questionnare consisted of six questions to be answered by checking off alternative answers or filling in a response. Respondents were not required to identify themselves, but were asked to name the county in which they practice.

Results • *A. Services performed in the full practice of Family Medicine* — Respondents were asked whether or not they included five different services in their full practice of Family Medicine, or whether they were ever included in their practice. The results are listed in Table 1.

Table 1.—Services Performed In The Full Practice of Family Medicine

	Yes	No	Never Included
Hospital Surgery	8%	30%	59%
Office Surgery	76%	13%	10%
Assisting in Surgery	16%	39%	42%
Obstetrics/No Surgery	6%	44%	46%
Plastic Surgery	3%	30%	63%
Obstetrical/Gynecological Surgery	4%	33%	59%

B. Reasons for discontinuation of special procedures — Respondents were asked their reasons for discontinuing special procedures. Many physicians had more than one reason, therefore, percentages of reasons shown in Table 2 exceed 100 percent.

Table 2.—Percentage of Reasons for Discontinuation of Special Procedures (for 288 physicians who responded)

The High Risk Liability Problem	91%
Personal Reasons	17%
Other	5%

"May stop assisting. Just doesn't pay enough to cover the increased malpractice premiums. And I've never been sued."

C. Opinion as to receipt of medical services by patients when practice is limited — Respondents were asked where patients may receive medical services if they limited their own practices. Many of the respondents had at least two responses to this question, therefore, percentages in Table 3 exceed 100 percent.

Table 3.—Percentage of Opinions as to Receipt of Medical Services By Patients If Respondents Limit Their Own Practices (for 375 physicians who responded)

From Colleagues in My Practice	26%
From Other Physicians	84%
From Midwives	6%
Other	4%

"Six out of eight (four family practitioners) who do obstetrics in (my town) are giving it up this year. The remaining Obstetricians do not accept new cases."

D. Carry professional liability insurance and reasons for not carrying professional liability insurance — Respondents were asked whether or not they carry professional liability insurance. Ninety-eight percent of the respondents said they do.

Respondents who said they do not carry professional liability insurance were asked their reasons. Some of the respondents had more than one reason, therefore percentages shown in Table 4 exceed 100 percent.

Table 4.—Percentage of Reasons for Not Carrying Professional Liability Insurance (for 12 physicians who do not)

Premiums Too High	75%
Other	25%

"I have had to quit obstetrics and vasectomies and assisting in surgery due to malpractice insurance costs."

E. Estimated cost increase due to practicing defensive medicine — Respondents were asked to fill in the estimated cost increase (dollar amount) and the estimated percentage increase due to practicing defensive medicine for four different types of common symptoms treated by family physicians. An "other" space was also provided with a blank line to be used for a description. Written into this space were: depression — subtle; trauma; emergency; obstetrics; routine office visit; fever; blood count, and biopsy. The responses to this question have been averaged in Table 5.

"Minimum three days critical care unit at hospital at $525 a day. Formerly would have observed at home."

Table 5.—Estimated Cost Increase Averages Due To Practicing Defensive Medicine

	Average Cost Increase	Number of Respondents	Average % Increase	Number of Respondents
G.I. Disturbance	$276	86	95%	287
Chest Pain	$542	86	53%	299
Headache	$375	84	58%	295
Auto Accident	$404	72	16%	286
Other	$324	8	70%	65

F. Percentage of consultations for own protection — In the final question, respondents were asked to fill in what percentage of consultations obtained are for their own protection. The average of the responses was 37 percent. The answers ranged from 0 to 100 percent.

Family Physicians, like their colleagues in other specialties, find themselves more and more looking over their shoulders for that lawsuit, as they attempt to conscientisouly care for their patients. The end result is higher cost to the patient, because of defensive medicine, and because many times the qualified family physician now refers many of the cases he used to care for to another specialist, in order to spread the risk.

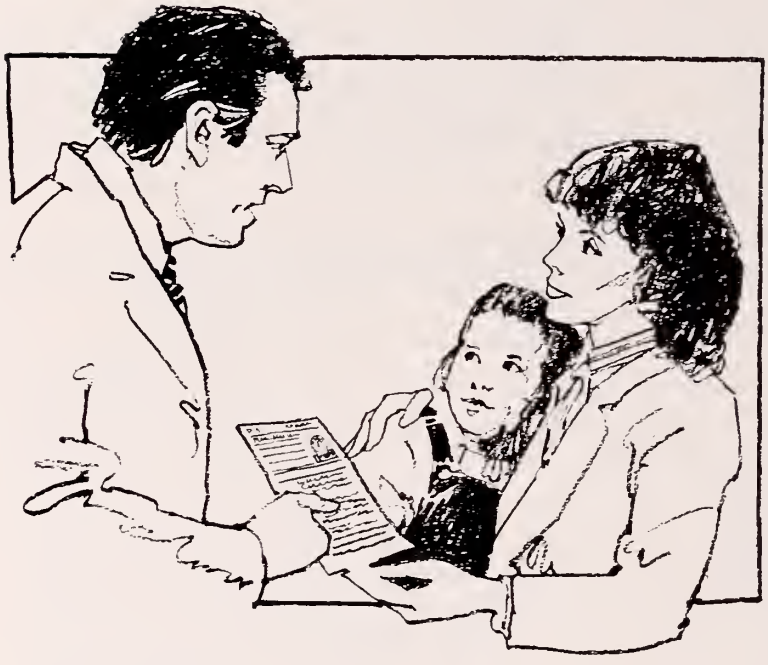
If legislative relief is not forth-coming, the public must be awakened to the fact that this is not a "doctors versus lawyers" issue, but one that very seriously concerns them and the caliber of the health care they receive.

• Dr. Selander, 1736 University, Blvd. S., Jacksonville 32216.

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ADVERSE REACTIONS: ASPIRIN: May cause epigastric discomfort, nausea, and vomiting. Hypersensitivity reactions, including urticaria, angioneurotic edema, purpura, asthma, and anaphylaxis may rarely occur. Patients receiving large doses of salicylates may develop tinnitus.

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GI: Nausea, vomiting, diarrhea.

CARDIOVASCULAR: Palpitation, tachycardia, various forms of arrhythmia, transient ECG changes, syncope, hypotensive crisis.

ALLERGIC OR IDIOSYNCRATIC: Milder reactions are characterized by itchy, urticarial, or erythematous maculopapular rash, generalized or confined to the groin. Other reactions include leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy, fever, fixed drug eruption with cross-reaction to carisoprodol, and cross-sensitivity between meprobamate, mebutamate and meprobamate-carbromal. Rare, more severe hypersensitivity reactions include hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, and anuria. Also, anaphylaxis, exfoliative dermatitis, stomatitis, and proctitis. Stevens-Johnson syndrome and bullous dermatitis have occurred.

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- Measured against 15, 30 and 60 mg doses of codeine phosphate in a double-blind study of 287 patients, 400-mg doses of ibuprofen proved "significantly better than codeine on almost all pain intensity, degree of relief and duration of analgesia parameters."[2]
- Measured against a propoxyphene-acetaminophen combination for pain relief after 3rd molar extractions, ibuprofen proved equally effective and caused fewer side effects. Ibuprofen was associated with faster recovery, evidenced by more rapid reduction of trismus and return to normal function.[3]
- Measured against post-episiotomy pain in 30 patients, "ibuprofen was effective in treating the swelling as well as pain...during the first and worst days. Therefore, it is not only the analgesic but also the anti-inflammatory effect of ibuprofen that are the beneficial factors..."[4]

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• no narcotic risk, red tape, records	• narcotic precautions required
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References:

1. Hart FD, Huskisson EC, Ansell BM in Hart FD (editor): Drug Treatment of the Rheumatic Diseases, 2nd Ed, Adis Press, Balgowlah, Australia, 1982, p. 30.
2. Rondeau PL, Yeung E, Nelson P: Canad Dent Assoc J 46:433-439, 1980.
3. Selwyn P and Giles AD: Br Jrl of Clin Practice, Supplement 6, Safe and effective analgesia following dental surgery: A comparison of brufen and distalgesic. Pg 87-90. 1980.
4. Taina E: Curr Med Res Opinion, 7:423-428, 1981.

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INDICATIONS AND USAGE: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in the long-term management of these diseases. Safety and effectiveness have not been established for Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain. Treatment of primary dysmenorrhea.

CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angio-edema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally, however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: *Coumarin-type anticoagulants*. The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS: **Incidence greater than 1%. Gastrointestinal**: The most frequent adverse reaction is gastrointestinal (4 to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). Central Nervous System: dizziness*, headache, nervousness. Dermatologic: rash* (including maculopapular type), pruritus. Special Senses: tinnitus. Metabolic: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS). *Incidence 3% to 9%.

Incidence less than 1 in 100. Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. Central Nervous System: depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma. Dermatologic: vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome and alopecia. *Special Senses*: hearing loss, amblyopia (blurred and/or diminished vision, scotomata and/or changes in color vision) [see PRECAUTIONS]. Hematologic: neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs' positive), thrombocytopenia with or without purpura eosinophilia, decreases in hemoglobin and hematocrit. Cardiovascular: congestive heart failure in patients with marginal cardiac function, elevated blood pressure. Allergic: syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis, bronchospasms (see CONTRAINDICATIONS). Renal: acute renal failure in patients with preexisting significantly impaired renal function, decreased creatinine clearance, polyuria, azotemia, cystitis, hematuria. Miscellaneous: dry eyes and mouth, gingival ulcers, rhinitis.

Causal relationship unknown. Gastrointestinal: pancreatitis. Central Nervous System: paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri. Dermatologic: toxic epidermal necrolysis, photoallergic skin reactions. Special Senses: conjunctivitis, diplopia, optic neuritis. Hematologic: bleeding episodes. Allergic: serum sickness, lupus erythematosus syndrome, Henoch-Schonlein vasculitis. Endocrine: gynecomastia, hypoglycemia. Cardiovascular: arrhythmias (sinus tachycardia, bradycardia, and palpitations). Renal: renal papillary necrosis.

OVERDOSAGE: Acute overdosage, the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit.

DOSAGE AND ADMINISTRATION: Rheumatoid arthritis and osteoarthritis, including flareups of chronic disease: Suggested dosage 400 mg t.i.d. or q.i.d.

Dysmenorrhea: 400 mg every 4 hours as necessary.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for the relief of pain. *Do not exceed 2,400 mg per day.*

CAUTION: Federal law prohibits dispensing without prescription.

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FLORIDA MEDICAL

DEPARTMENTS

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NOTES & NEWS

Dr. Greer named President-Elect of American Academy of Neurology



Dr. Greer

Melvin Greer, M.D., professor and chairman of the Department of Neurology at the University of Florida's College of Medicine, is the new president-elect of the American Academy of Neurology. He will serve in this capacity for two years until he takes office as president in 1985.

More than 8,000 neurologists from throughout America and several foreign countries hold membership in the academy, the major organization for physicians who specialize in neurology. Dr. Greer has filled numerous leadership roles with the society, serving as secretary-treasurer from 1977 to 1981, and on the editorial and publications committee for the past four years. He also is a former member of the academy's executive board and committee and a past chairman of the Section on Child Neurology.

A graduate of New York University College of Medicine and a member of the UF's medical faculty since 1961, Dr. Greer is a Fellow in both the American Academy of Neurology and the American Academy of Pediatrics. Active in numerous other state and national organizations concerned with neurology and pediatrics, he has contributed extensively to scientific literature regarding such common neurological diseases as epilepsy, stroke and Parkinson's disease.

Dr. William Luttge named Chairman of Neuroscience Department at UF



Dr. Luttge

William G. Luttge, Ph.D., a medical educator and research scientist who has devoted nearly 12 years to investigating how steroid hormones affect brain function, has been appointed chairman of the Department of Neuroscience at the University of Florida's College of Medicine.

In announcing the appointment, Dr. William Deal, dean of the college, noted that Dr. Luttge has contributed significantly to the college's basic science program since joining the faculty in 1971 and has demonstrated his administrative capabilities through five years of service as acting chairman of the neuroscience department.

In addition to his own productive involvement in neuroscience research, Luttge has filled special assignments in the medical college, including service on the college's executive committee and basic science board. He also serves on the VA research grant review committee in Gainesville.

His major current research projects include an investigation of the physicochemistry of glucorticoid receptors and the endocrine control of salt appetite in rats. The latter project is funded by a National Institutes of Health grant of $267,169. Dr. Luttge is co-principal investigator on this grant, along with Drs. Melvin Fregly and Neal Rowland.

Luttge is co-author of a recent textbook entitled *Human Endocrinology: An Interactive Text* (Elevier Biochemical). He has published extensively in scientific journals of endocrinology, pharmacology, neurochemistry and brain research, and has contributed to several current reference books. He is a member of the American Society for Neurochemistry, the International Society for Psychoneuroendocrinology, the Society for Neuroscience, and the Endocrine Society.

A native of Escondido, Calfornia, Dr. Luttge earned both his master of science and doctoral degrees in biological sciences at the University of California at Irvine. He completed a predoctoral fellowship funded by the National Institute of Mental Health before accepting appointment as UF assistant professor of neuroscience.

Dr. Carter receives American College of Allergists award

Gerald F. Carter, M.D., F.A.C.A., a pediatric allergist from Miami, was recently honored at the 39th Annual Congress of the American College of Allergists held in New Orleans. The Award of Merit was presented for outstanding performance in the field of clinical allergy and immunology.



Dr. Carter

Dr. Carter is past president of the Florida Allergy Society and is currently President of the Pan American Medical Association Section on Allergy and Immunology. This association currently has a membership of over 10,000.

A fresh look at JCAH standards

With respect to the standards of the Joint Commission on Accrediation of Hospitals (JCAH), it is imperative to emphasize that there is one primary, over-riding principle to which the AMA is devoted.

It is that physicians, individually and collectively, as members of hospital medical staffs, are and should be responsible for staff structure, credentials, privileges, quality assurance and due process.

It is equally important to recognize that total responsibility for the quality of patient care does, and must, rest where it has always been: with the individual hospital governing board and its medical staff.

It is in keeping with that unswerving commitment that the AMA Board of Trustees had asked the JCAH to incorporate certain provisions into the Medical Staff chapter of its 1984 "Accreditation Manual for Hospitals," which was expected to be published in August, 1983.

The AMA's views on those provisions were circulated to members in February, 1983, for their review.

Reaction was immediate and emotional. As a consequence, on April 8, 1983, the AMA Board of Trustees confirmed an action taken in March by the AMA Commissioners to the JCAH.

The action outlined a set of principles for inclusion in future drafts of the Medical Staff chapter.

The principles are:

1. Continue the use of the term "Medical Staff" in the title of the chapter and throughout the accreditation manual.
2. Delete references to dentists, podiatrists, oral surgeons and other limited-licensed practitioners in the Medical Staff chapter.
3. Ensure access for limited-licensed practitioners.
4. Require greater than a simple majority of fully licensed physicians on the medical staff executive committee in acute-care general hospitals.
5. Provide for exceptions in item 4 in other hospitals.
6. Ensure that all hospitalized patients receive the same standard of care through appropriate language relating to admissions and the responsibility for the medical care of patients.

At its meeting on March 27, the JCAH Standards and Survey Procedures Committee instructed JCAH staff, with professional assistance, to draft standards language for principles similar to those approved by the AMA Board of Trustees.

The AMA Board had previously requested the JCAH Board of Commissioners to defer final action on any revisions in the Medical Staff chapter until its August meeting, to allow for full consideration of the issue by AMA members.

The JCAH Standards and Survey Procedures Committee has instructed its subcommittee on the Medical Staff Standards to recommend a new draft of the Medical Staff chapter to the full committee. No final action on the Medical Staff standards is expected before the August meeting of the JCAH Board of Commissioners, with publication of the 1984 "Accreditation Manual for Hospitals" scheduled for October 1983.

Throughout the remainder of the standards revision process, the AMA will continue to strive for the development of standards that provide for quality patient care; are flexible; meet the needs of physicians and hospitals; and recognize the legal aspects of standard-setting activities.

Other members of the JCAH are the American College of Physicians; American College of Surgeons; American Dental Association; American Hospital Association; and one public member.

DEAN'S MESSAGE

For better or for worse?

With cat-like quickness, a change in our health care system is set to begin on October 1, 1983. This change has far more ramifications than the Medicare Act implemented in 1965. Terms like "diagnostic related groups (DRGs)" and "prospective payments"

are not household words — even in medical households. Yet when fully implemented in 1987, the DRG/prospective payment system will have changed the complexion of physician and hospital interrelationships.

To date the physician has determined when a patient is to be hospitalized, ordered required diagnostic procedures and therapy, and has decided when the patient is to be discharged. This system has been effective in the physician managed, high-quality practice of medicine in our nation for decades.

The prospective payment system of reimbursement for hospitalization based on diagnostic related groups will create tensions between hospital management and physicians. Hospital directors may press for early discharges since the hospital will be reimbursed at a flat rate based on discharge diagnosis. Thus there is management incentive to: (a) reduce the length of hospital stay, and (b) reduce the number of diagnostic examinations in order to reduce hospital costs. Reimbursement will be the same for a particular diagnosis regardless of length of stay or the number of procedures performed. Hence, by reducing the length of stay and/or the number of diagnostic tests, the reimbursement over expenses will be increased. THIS FORM OF HOSPITAL REIMBURSEMENT DOES NOT CONSIDER QUALITY OF CARE.

Recently an example of the DRG system was discussed. A patient was admitted with a chief comlaint of right-sided chest pain and tenderness in the right calf. The admitting diagnosis was deep vein thrombophlebitis with pulmonary embolus. After anticoagulant therapy and a fifteen-day hospitalization, the patient was discharged. Discharge diagnoses were: deep vein thrombophlebitis with consequent pulmonary embolus.

If the discharge diagnoses were coded: 1. thrombophlebitis, 2. pulmonary embolus, the hospital would be reimbursed $4,574. However, if the discharge diagnoses were coded: 1. pulmonary emblus, 2. thrombophlebitis, the hospital would be reimbursed $7,408.

Who determines the sequence of the final discharge diagnoses? — The ward clerk, a medical records clerk, the accounting office, the physician, or a committee?

Many unknowns face us as we enter this new system. Medical practice will not be "business as usual." It is incumbent upon every physician to become knowledgeable about the changes forthcoming. Each physician and hospital across the land will be affected and, furthermore, each patient will be affected — for better or for worse.

William B. Deal, M.D.
Dean, College of Medicine
Associate Vice President
for Clinical Affairs
University of Florida
Gainesville

CORRESPONDENCE

To the Editor: I have just finished perusing the April 1983 issue. The articles on learning disabilities are excellent and the authors are obviously quite learned people.

However, please, please, give us ordinary mortals with learning disabilities a break!

ADD SLD DSL IEP MBD SLI SBER LD

Is there really any saving in paper, printers ink, typist's time? I doubt it. Use of acronyms is an effort to impress readers. The impression on me is not admiration, but frustration because of the frequent necessity of referrring back to see the meaning.

I dare any of the authors to go to the English Department of his affiliated university for an opinion. Any interruption of the train of thought is not acceptable in Bonehead Freshman English themes and should be forbidden in scientific articles.

No offense is meant. The articles are good.

Benjamin H. Sullivan, M.D.
Sarasota

WORTH REPEATING

Beware the low-bid mentality

I sense the development of an attitude among Health Care Planners that makes me uneasy. I think it can be described as the low bid mentality, which is a philosophy that has been well developed by other bureaucratic types to prevent abuses of public office and to protect the interest of the Public in the expenditure of tax money. Insofar as it accomplishes these things, it is of value. However, it can be carried to such a ridiculous extreme as to be self-defeating.

It would appear to be obvious good sense to shop around before making a significant purchase. Look for the best item that serves the desired purpose at the lowest price. This requires two qualities, effort and sufficient knowledge and skill to evaluate the quality of the items being compared. That is wise shopping certainly encourages the suppliers to provide the best possible product at the lowest possible price. The bidding process, on the other hand, operates in a reverse fashion. Here the purchaser creates specifications for the desired item and then challenges the suppliers to provide it as cheaply as possible. If the specifications insure that the item of each supplier is

comparable to that of every other supplier, then the most efficient one will obtain the contract. Assume, however, that it is possible to fudge and falsify on the specifications. The item supplied by the low bidder will appear to be of lesser quality. That assumption is what the low bidder mentality assumes will happen if not prevented by rigid regulations and careful monitoring by means of voluminous reports and detailed inspections.

Perhaps this bidding process is the way to go if one is purchasing an item for which strict specifications can be written and one which permits accurate determination of quality to be certain the specifications are met. It bothers me a great deal, though, to hear lay planners transferring this philosophy to the purchase of medical services. They insist on Quality Assurance programs and have plans to monitor closely to be certain the programs are effective; and yet there seems to be uncertainty as to what constitutes good quality medical care. They just assume that without their regulations and monitoring efforts, the quality will be poor. I resent that.

Quality can be assured and must be assured but it can be recognized and appreciated best by those within the profession. That is where its assurance must come from.

Undoubtedly the time is here when we must negotiate with those who are paying for our services but what we are selling is too personal and individualized to be forced into a single package by a set of specifications. We must market a service, the quality of which will surmount any questioning and for a price that is reasonable and fair. The bidding process can only lead to deterioration.

James K. Conn, M.D.
Tallahassee

Reprinted with permission from the *Capital County Medical Society Newsletter*, April 1983.

"Call us; we'll be right here..."

'Tis indeed an incongruity when a person decides at a very early age to devote a large time of his talent and energies to becoming a physician, goes through medical school, the residency training and all the details of establishing a practice, only to learn there is so much negativism about his chosen profession. If he works long and hard enough, among the rewards is a way of living that, instead of being unnoted, is criticized, as though the physician is not to enjoy any material fruits of his labor. For example, medical science has done much to prolong life expectancy and yet doctors are often berated and vilified as though the problems of the elderly were caused by us.

'Tis an incongruity that in the United States we have the highest standards of living and education per capita than any other place in the world, yet we have such cults practicing and thriving as chiropractic. It is an incongruity that our government and the media, as well as other segments of the public, preach vociferously that we should render the best medical care, but always with "cost-containment" in mind. Add to this how on one hand we are exhorted to practice preventive medicine and teach the public and, on the other hand, the very same government grants such things as tobacco subsidies, aiding in the growth, production and dissemination of that very poison which contributes so much in the way of disabilities, work loss, medical costs, etc., with chronic obstructive lung disease, cancer and the various complications of atherosclerosis.

The list of these things can go on and on: defensive medicine versus wrongful professional liability suits; doctors of medicine in unification versus groups of practitioners pitted against each other in local politics; subspecialists extolling the virtues of the purity of their practices while simultaneously performing in the area of other specialties; 90% of the membership complaining, not attending meetings and doing no work while the other 10% do it all.

Yes, organized medicine is indeed challenged today and though it is said that the cream always rises to the top there are impurities in the sediment that need to be strained. The repeated call to get involved should be heeded, not ignored, and every single member, especially the newer arrivals, owe it not only to the profession, himself and family, but to society in general to indeed get involved.

"Call us; we'll be right here."

Wiley E. Koon, M.D.
Winter Haven

Reprinted with permission from *The Bulletin of Polk County Medical Association*, April 1983.

The transition generation

It has often been said the 20th century has seen a remarkable growth in medical knowledge. The relative rapid growth of medical knowledge, the technological advances that we have witnessed have required the individual physician to exert a considerable amount of effort to keep pace with these achievements and incorporate into his own practice that which has proved beneficial to patient care and practical to employ. This, the conscientious physician must do, personal and "mandatory" continuing medical education.

However, concomitant with the medical advances that we have observed in our professional lifetimes,

there have also been social and cultural changes of tremendous import occurring in our country. Industrial growth, the "Space Age," the computerization of our society, multicultural integration (despite the hopefully temporary bi- or multilingual educational and ballot movement), the increasing availability of educational opportunities (despite criticism of our educational system), the increasing mobility of the population in general, the changing mores and its effects on the family unit, and many other factors have changed the societal environment in which we live now from that in which we grew up.

So too has the milieu of medicine changed as well. Growing up in an era of the esteemed family physician, seeing the advance of specialization and subspecialization, the increasing sophistication of patients, spurred by the mass media, although we as physicians and society in general sometimes wistfully think of the "good old (horse and buggy, laissez-faire) days," the advances that we have seen truly led to better medical care and increase in life expectancy of our population. However, also in the practice of medicine, notably since the days of Medicare, and the increasing regulations of governmental agencies, both at the state and federal level, the amount of paper work in medicine has increased, the compensation system has been gradually changing, and the nature of medical practice itself (witness the growth in group style practice) has occurred.

Physicians who trained in the 1960's or before have also witnessed significant changes in the graduate education programs subsequent to that time, including better working conditions for residents.

The generation of physicians now nearing the end of their active practice lives has been able to withstand these changes and still practice generally in the style they have been brought up with and were used to. The generation of physicians now in training and the physicians-to-be later in the 1980's and 1990's may well have to deal with less personal corporate or governmentally-dominated medicine. It falls to us, "the transition generation" who have seen what the private practice of medicine has been and the portents of the future, to attempt to preserve that which is the best of our present system as we prepare for the potential changes ahead. Now, in fact, it is incumbent upon us to actively participate in the decisions concerning medicine being made by nonphysicians whether they be hospital administrators, hospital governing bodies, city and county councilmen, state and federal legislators, bureaucrats in regulatory agencies, and paraprofessionals.

"Not to decide is to decide." The failure of our generation of physicians to participate in the process may ultimately lead to the demise of the personal system of medical care which will not be in the best interests of quality patient care. And, despite the sometimes strident voices of nonphysicians, who else is best able to serve as the patient's advocate and give testimony as to the needs of the patient for provision of quality medical services but his/her physician?

Martin S. Feigenbaum, M.D.

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Auxiliary on the move

The Florida Medical Association Auxiliary (FMA-A) is composed of nearly 5,700 spouses of FMA members. The Auxiliary recently became the second largest state medical auxiliary in the nation (after Texas).

By promoting health education, encouraging participation of volunteers in activities that meet health needs, and supporting health-related charitable endeavors, the Auxiliary helps the FMA fulfill its goals for advancement of medicine and public health through philanthropic and educational programs.

The FMA-A contributes funds to three major programs: American Medical Association Education and Research Foundation (AMA-ERF), International Health (IH), and the Florida Medical Foundation Imparied Physicians Program.

During 1982-83, the Auxiliary raised $101,223.80 for AMA-ERF, an impressive increase over the 1981-82 total of $85,000. Florida has 100% participation in fund-raising efforts for AMA-ERF from 30 organized county auxiliaries in the State. Most of the income was derived from the sale of Holiday Sharing Cards (greeting cards), but other fund raising efforts included the sale of T-shirts, tote bags and aprons, and the Art Show held at the Annual Meeting of the FMA. On the county level projects included various luncheons, auctions, sale of AMA-ERF stationery, and note pads. AMA-ERF supports loans for medical students, interns and residents, and provides unrestricted funds for medical schools.

The second annual "Silent Auction" generated more than $1,000 for International Health. The 1982-83 proceeds from the FMA-A cookbook, *Rx for Fine Dining*, were allocated by the Board of Directors of FMA-A for IH. County auxiliaries used other means to support IH, such as International Dinners and Costume Parties.

IH covers many excellent programs, and International Reconstructive Surgery Programs (Interplast South) was the 1982-83 recipient of the FMA-A funds. Volunteer surgeons, anesthesiologists, pediatricians and nurses travel to underdeveloped countries to perform reconstructive surgery where it is not available. Patients are usually children victimized by congenital defects, severe burns and crippling injuries. While all personal services are rendered on a volunteer basis, funds are provided for traveling expenses, pharmaceuticals, surgical anesthetic equipment and other costs.

The FMF-Impaired Physicians Program funds were raised by the Auxiliary through the sale of citrus fruit and reproductions of the "Caduccus" painting of the late Lee Adams. At the Annual Meeting, a check for $5,000 was presented to the Foundation earmarked for the Impaired Physicians Program. Profits from the second printing of *Rx for Fine Dining* will be donated to the Impaired Physicians Program, which is designed to rehabilitate physicians who are impaired through alcohol or other chemical dependencies. The Auxiliary contributions will help bolster the Program's treatment loan fund for physicians whose insurance generally does not cover treatment of addictive diseases.

Through cumulative efforts of the Auxiliary, these projects provide activities on a year round basis. Auxilians throughout Florida continue to reach for the stars in every area of endeavor and they continue to achieve their goals. The Florida Medical Association Auxiliary is truly an Auxiliary on the move.

Russell E. Berge
Executive Director
FMA-A

Florida Medical Association Auxiliary, Inc.
Elected Officers 1983-1984

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Recording Secretary:	Mrs. V.A. Marks (Susan)
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Meetings

Accepted by the FMA Committee on Continuing Medical Education for Mandatory Credit

JULY

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", July 7, The Breakers Hotel, Palm Beach. For information: Candance Draper, PIMCO, 354-5910; WATS 1-800-342-8349.

1983 Clinical Conference on Pre-hospital Emergency Care, July 8-10, Hyatt Orlando, Orlando. For information: 1983 CliniCon Registrar, 600 Courtland Street, Suite 420, Orlando 32804, (305) 628-4800.

Estrogen Replacement Therapy/Osteoporosis, July 18, St. Mary's Hospital, W. Palm Beach. For info.: Gerald J. O'Connor, M.D., 901 45th Street, West Palm Beach 33407, (305) 689-1633.

Current Problems in Surgical Pathology with Clinical Correlates, July 19, Good Samaritan Hospital, West Palm Beach. For information: Harvey Cove, M.D., Good Samaritan Hospital, P.O. Box 3166, West Palm Bch. 33402, (305) 655-5511.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", July 21, Pier 66, Ft. Lauderdale. For information: Candace Draper, PIMCO, 354-5910, WATS 1-800-342-8349.

Surgical Pathology Correlation Conference, July 21, St. Mary's Hospital Library, W. Palm Beach. For information: H. Hoghooghi, M.D., 901 45th Street, West Palm Beach 33407, (305) 844-6311, ext. 5190.

ECG Interpretation and Arrhythmia Management, July 22-24, Orlando Hyatt, Orlando. For information: H. Bronson, M.D., International Medical Education Corporation, 64 Inverness Drive East, Englewood, CO 80112, (303) 333-1577.

Advanced Cardiac Life Support, July 23-24, University of South Florida and Bayfront Medical Center, Tampa & St. Petersburg. For information: Charles Aucremann, M.D., USF, Dept. of Family Practice, Tampa (813) 823-1234.

Tenth Annual Review Course for Certification in IM — "Fundamental and Clinical Aspects of Internal Medicine" July 31-August 13, Sheraton Bal Harbour Hotel, Miami Beach. For information: Jose S. Bocles, M.D., UM, Dept. of Medicine, (305) 547-6063.

AUGUST

1983 Summer Medical/Surgical Symposium, August 6-7, Holiday Inn Oceanfront, Indialantic. For information: Thomas Netter, M.D., P.O. Box 838, Sebastian 32958, (305) 589-3186.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", August 18, Holiday Inn, Merritt Island. For information: Candace Draper, PIMCO, 354-5910, WATS 1-800-342-8349.

Ambulatory Electrocardiography: Clinical Applications, Methodology and Interpretation, August 26-28, Orlando Hyatt, Orlando. For information: Howard Bronson, M.D., International Medical Education Corporation, 64 Inverness Drive E., Englewood, CO 80112, (303) 333-1577.

SEPTEMBER

USF - Sun Bay Community Hospital Surgical Dept. CME Program, September 8, Sun Bay Community Hospital, St. Petersburg. For information: Roy Behnke, M.D., 3030 Sixth Street South, St. Petersburg 33705, (813) 974-2271 or 823-1122.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", Holiday Inn, Fort Myers. For information: Candace Draper, PIMCO, (904) 354-5910, WATS 1-800-342-8349.

C.O.P.D. Update and Asthma, September 15, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Ave., Spring Hill 33526, (904) 683-9440.

Tips, Tricks, Traps and Techniques in Family Practice, September 15-18, Ponce DeLeon Lodge, St. Augustine. For informatio: Thomas Michelsen, M.D., 3599 University Blvd., Suite 400, Jacksovnille 32216, (904) 399-1231.

CME Seminars 1983 — Cuban Medical Association, Sept. 16, Univ. of Miami School of Medicine, 8th Floor Mailman Center, Miami. For information: M. Viamonte Jr., M.D., P.O. Box 341016, Coral Gables 33234, (305) 446-9902 or 674-2680.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", September 29, Tallahassee Hilton, Tallahassee. For information: Candace Draper, PIMCO, (904) 354-5910, WATS 1-800-342-8349.

7th Annual Medical Aspects of Aging, September 30-October 1, Gainesville Hilton, Gainesville. For information: James Jernigan, M.D., Box J-233, JHM Health Center, Gainesville 32610, (904) 392-4527.

OCTOBER

AAFP Annual Scientific Assembly, October 10-13, Miami Beach Convention Ctr., Miami. For information: Edward Daleske, (816) 333-9700 (Missouri).

Diagnostic and Treatment Dilemmas in Office Psychiatry, October 14, Marriott Hotel, Orlando. For information: Orris O. Rollie, M.D., (305) 896-6611, Ext. 1815.

Profiles in Arthritis, October 15, Marriott Hotel, Orlando. For information: Orris Rollie, M.D., (305) 896-6611 Ext. 1815.

18th Family Practice Review, October 17-21, Dutch Resort Hotel, Lake Buena Vista. For information: L. Crevasse, M.D., (904) 392-3143.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", October 20, Loch Haven Arts Center, Orlando. For info.: Candace Draper, PIMCO, (904) 354-5910, WATS 1-800-342-8349.

Cutaneous Signs of Connective Tissue Disorders: Lupus Erythematosis, Dermatomyositis and Scleroderma, Oct. 20, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Ave., Spring Hill 33526, (904) 683-9400.

Advanced Neuroradiology Seminar, October 26-29, Near Disney World, Orlando. For information: Charleen Krissman, 12901 North 30th Street, Tampa 33612, (813) 974-2538.

24th Workshop in Electrocardiography, October 27-31, Sheraton Sand Key Hotel, Clearwater Beach. For information: Henry Marriott, M.D., Saint Anthony's Hospital, St. Petersburg, (813) 894-0790.

68th Scientific Assembly, Oct. 31-November 3, Diplomat Resort, Hollywood. For information: Ray W. Gifford Jr., M.D., (608) 257-6781.

NOVEMBER

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", Nov. 3, Cedars of Lebanon Medical Ctr., Orlando. For info.: Candace Draper, PIMCO, (904) 354-5910, WATS 1-800-342-8349.

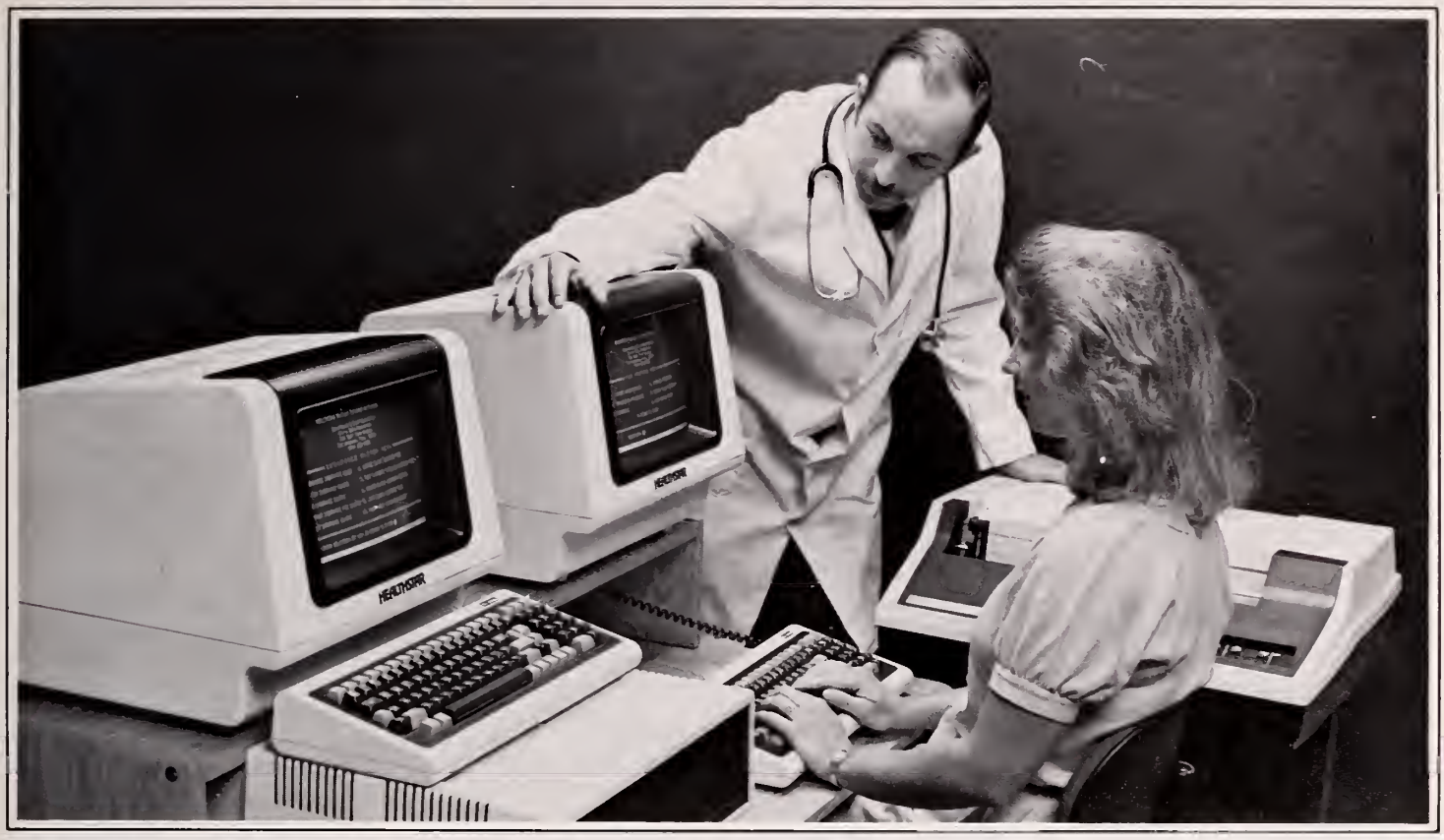
Spinal Deformities, November 6-9, Sheraton Bal Harbour, Bal Harbour. For information: Barry Silverman, M.D., 4300 Alton Rd., Miami Beach 33140, (305) 674-2121.

Non-Cardiac Surgery in the Cardiac Patient, November 11, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Ave., Spring Hill 33526, (904) 683-9400.

Medical Malpactice Prevention Seminar — "Anatomy of a Malpractice Case", November 17, Holiday Inn, Tampa. For information: Candace Draper, PIMCO, (904) 354-5910, WATS 1-800-342-8349.

Childhood Cancer: Current Controversies, November 17-19, Caribbean Gulf Resort Hotel, Clearwater. For information: Cindi Butson, P.O. Box 13372, University Station, Gainesville 32604 (904) 375-6848.

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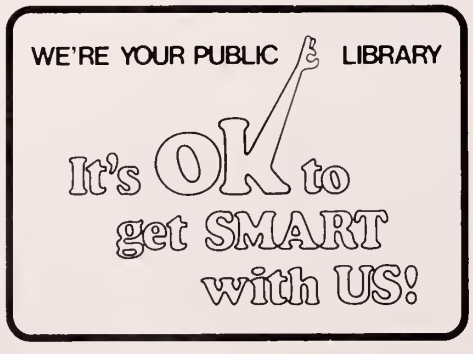
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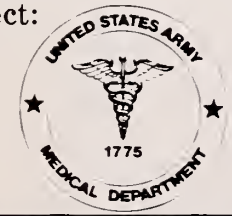
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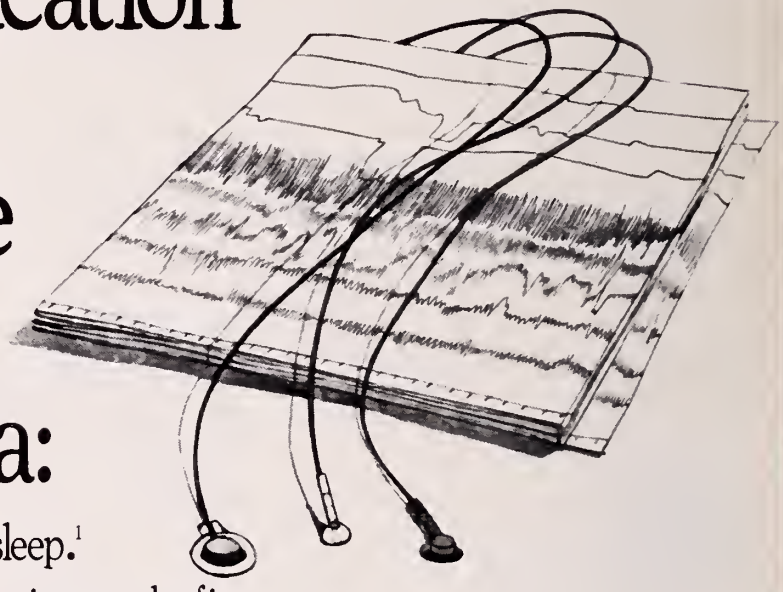
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Summary of the FMA Board of Governors Meeting June 11, 1983

The following is a summary of the major actions taken by the Board of Governors at its meeting June 11, 1983.

THE BOARD:

Professional Liability

The Board expressed great disappointment that the leadership of the House of Representatives did not act to allow the full House an opportunity to vote on the professional liability issue prior to the adjournment of the Regular Session of the Legislature. The Board expressed appreciation to the Florida Senate for its decisive and positive actions taken toward resolving the professional liability crisis in Florida by overwhelmingly approving much needed reform in Florida's tort system. The bill passed by the Senate, HB 1182, and sent to the House for action was buried by multiple committee referral. All efforts to obtain a vote by the full House in the waning hours of the Session were unsuccessful. The Board was advised that subsequent to the adjournment of the Regular Session of the Legislature, an immediate appeal was made to the President of the Senate and the Speaker of the House to include the professional liability issue among those items to be considered in any extended or special session of the Legislature. In addition, a request has been made to the Governor to include the issue in any special session that he may call.

The Board of Governors determined that resolution of the professional liability crisis in Florida on a long-term basis would remain the Association's top priority.

The Board expressed its sincere appreciation to Senator George Kirkpatrick who served as the primary sponsor for the FMA's tort reform package in the Senate and commended FMA's Committee on Professional Liability Chairman, Dr. T. Byron Thames and FMA's Immediate Past President, Dr. Robert E. Windom for their exemplary efforts during the past year in working to resolve this serious problem. The Board also commended the many physicians and their spouses, FMA staff and FMA legislative consultants for their outstanding efforts on this issue.

1983-84 FMA Priorities

The Board approved the Association's priorities for 1983-84:

MEMBERSHIP

A. The Association will continue to work toward a permanent solution to the professional liability crisis in Florida through legislative, judicial and constitutional remedies, as indicated.

B. Develop programs to increase awareness among practicing physicians of the importance of maintaining a relationship with their patients which is responsive to their medical and emotional well-being and which fosters open communications between the patient and the physician.

C. Develop, in cooperation with component county medical societies, the FMA Auxiliary, and FMA-recognized specialty societies, public relations programs designed to improve the image of organized medicine and the individual physician as perceived by the news media and the public including an awareness of the contributions that the medical community makes to society at all levels through the provision of quality health care and through the continued pursuit of advancements in medical technology and procedures to improve quality and longevity of life.

D. Continued emphasis on a com-

prehensive and ongoing media relations program implemented in cooperation with component county medical societies.

E. Continued efforts toward implementation of a statewide Impaired Physicians Program with a full-time medical director.

F. Continued efforts to develop among FMA members an awareness of their individual responsibility for becoming actively involved, through organized medicine, in the decisions that will be made by the Legislature and other governmental bodies affecting the mechanisms and level of health care delivery in Florida and throughout the country including, but not limited to, health care financing and systems of health care delivery; i.e., Health Maintenance Organizations, Individual Practice Associations, Preferred Provider Organizations, Diagnostic Related Groupings, health care competition, utilization review, peer review mechanisms, and other cost containment initiatives.

G. Develop an awareness among FMA members of the factors underlying the increases in the cost of health care and evaluate the physician's role in addressing the concerns regarding health care costs.

H. Continue efforts to improve communication and cooperation regarding programs and activities of the FMA with component county medical societies, the membership directly, and FMA-recognized specialty societies including maximum development of the GTE Telenet Medical Information Network in Florida.

I. Continue to monitor the current relationships of physicians, individually and collectively, with hospitals and other health care facilities with appropriate actions, when indicated, to ensure preservation of the role of the physician as having primary responsibility and authority for the management of patient care but with productive interaction with allied health groups.

J. Membership development at the county, state and national levels to include medical student and house staff representatives.

K. Encourage FMA members to exercise their individual responsibility for becoming actively involved in community affairs and the political process including legislation and political action activities.

L. The FMA will continue to explore every avenue to assure that physicians are equitably reimbursed for the services that they render to government-sponsored health care programs including the Florida Workers' Compensation program. The Association, following the directive of the 1983 FMA House of Delegates, will continue its efforts to achieve equitable payment for health care services which recognizes regional differentials in those counties where the total cost of health care delivery is demonstrated to be higher than the average for the remainder of the state.

PROGRAMS

A. Continue efforts to inform the public, the Legislature, and the judiciary of the facts regarding the critical need to resolve the Professional Liability crisis and the deleterious effect that this problem is having upon the patient/physician relationship and the cost and quality of health care in Florida.

B. Creation of a public awareness of the high level of quality and availability of health care in Florida and the contributions that the medical community makes on an ongoing basis to the preservation and quality of individual life, the public's health, and to the cultural growth of the community at large.

C. That the Association actively participate in a cooperative effort with the Legislature, appropriate governmental bodies, and voluntary groups in the development and implementation of meaningful and equitable programs to respond to the concerns of the continuing increase in the cost of health care delivery with the primary goal of ensuring the continued provision of the highest level of quality medical care within the private free enterprise system of health care delivery including:

1. An objective assessment and reporting on the underlying causes of rising health care costs in Florida.

2. An evaluation of the impact of health care costs on the public with particular emphasis on Florida's increasing elderly population, the designated medically indigent, the unemployed, business and industry.

3. Informational programs for the purpose of advising FMA members, the public, the Legislature and other governmental bodies on the positive and negative aspects of innovative initiatives and programs designed to cut or contain the cost of health care, such as Preferred Provider Organizations, Health Maintenance Organizations, Individual Practice Associations, health care competition, utilization review programs, peer review mechanisms and other cost containment initiatives.

D. The Association will continue to promote and participate in programs addressing emergency medical services, the health needs of the aging, substance abuse, public health and school health that impact upon the health and well-being of all Floridians including:

1. The implementation of the first-year recommendation of the FMF Emergency Medical Services Project.

2. Providing medical leadership in the implementation of the AMA Prescription Abuse Data Synthesis (PADS) model through direct involvement with the appropriate state agencies and assuring a program of identification and referral of impaired physicians to the Committee on Impaired Physicians.

3. Focusing on the problems of toxic substances in the environment and their impact on public health.

4. Developing and promoting a uniform, statewide pre-athletic participation physical examination.

E. The Association will increase its efforts to establish channels of communication and cooperation with voluntary health agencies, allied health groups, the Florida Hospital Association, medical professional organizations, senior citizen organizations and third-party carriers in order to create meaningful health care coalitions in Florida to address issues of mutual concern.

F. Continue to work toward a cooperative relationship with other departments and agencies of state government in health care related issues.

G. Seek direct physician participation at the policy-making level for health planning and other state-administered health care programs including the rule-making process.

H. The Association will continue to oppose vigorously the practice of medicine other than by medical or osteopathic physicians.

I. The Association will strive to become the acknowledged leader in Florida in the promotion and coordination of scientific and educational medical activities including:

1. Identifying physicians and non-physicians throughout Florida who have direct responsibility for the provision of continuing medical education activities and providing them with appropriate up-to-date information on CME and accreditation procedures and requirements.

2. The development of an FMA booklet on CME explaining the Association's program.

3. Providing assistance to county medical societies, specialty societies and hospitals relative to procedures and requirements for high-quality programs of CME.

J. That pursuant to the actions of the FMA House of Delegates in May 1983, the Association, through the Florida Medical Foundation or other appropriate entity, apply for designation as the statewide peer review organization (PRO) in Florida as authorized under the Tax Equity and Fiscal Responsibility Act of 1982 (PL 97-248) for the purpose of promoting the efficient and economical delivery of health care services while assuring and promoting the quality of care rendered. It is the intent of the Association that, to the greatest extent possible, the FMF-PRO will through local county medical societies or their designated

physician-established mechanisms implement the PRO activities at the local level. It is further the Association's intent that qualified physicians maintain primary responsibility and authority for the peer review process.

PUBLIC

Continue to provide the public, governmental bodies and the news media with timely and responsive Association views on:

A. The seriousness of the problem of professional liability and cost of health care liability insurance in Florida and how it affects all segments of society.

B. Preventive health care educational programs.

C. Health of the public.

D. Standards for health care delivery and qualified health care professionals including health planning and qualified review of the quality and appropriateness of health care delivery.

E. The underlying factors of the cost of health care.

F. Alternative health care delivery systems.

G. Health care financing initiatives.

H. The role of government in health care delivery.

AMERICAN MEDICAL ASSOCIATION (AMA)

A. Continue efforts for AMA membership development.

B. Cooperative effort to coordinate programs and activities at all levels of the Federation.

C. That the AMA be encouraged to make every effort to create a greater public awareness of the high level of quality and availability of health care in this country and the contributions that the medical community makes to society at all levels through the provision of quality health care and through continued pursuit of advancements in medical technology and procedures by physicians to improve the quality and longevity of life, and to the cultural growth of their community.

D. Encourage the AMA to actively create an awareness among the Congress, other governmental bodies, and the public of the severe litigation problem in this country particularly the Professional Medical Liability problem and the deleterious effect that it is having on the cost and quality of health care.

E. That the AMA continue to address before Congress and other governmental bodies organized medicine's views on the standards for health care delivery and qualified health care professionals, the underlying factors affecting the cost of health care, the positive and negative aspects of innovative cost containment initiatives, and that the AMA continue to exert its full efforts to ensure the preservation of the country's private free enterprise system of health care delivery.

ISSUES

A. Medical Professional Liability.

B. Cost of medical care.

C. Improving the patient/physician relationships and communication.

D. Public awareness of the contributions of medicine to the quality of society.

E. Continued opposition to any compulsory comprehensive national health insurance program.

F. Opposition to the practice of medicine by other than medical or osteopathic physicians.

G. Alternative health care delivery systems.

1984 Annual Meeting Format

Established the format for the 1984 Annual Meeting which is scheduled to be held at the Palace Hotel in Lake Buena Vista, Florida, May 2-6, 1984 and approved as the scientific theme, "The Health of the Public".

House of Delegates Ratio

Approved continuation of the current allocation of delegates of one delegate for every 50 active members as the ratio for determining delegates for the 1984 Annual Meeting.

FMA Election Procedures

Approved in principle a modification of the current election procedures of the Association for future annual meetings similar to those procedures utilized by the AMA, and requested the Speaker of the House to make recommendations to

the Board of Governors regarding a suitable format to be followed.

Future Meeting Dates 1983-1984

Adopted FMA meeting dates as follows:

FMA Executive Comm., Oct. 26, 1983
FMA Board of Gov., Oct. 27-30, 1983
FMA Executive Comm., Jan. 13, 1984
FMA Board of Gov., Jan 14-15, 1984
FMA Leadership Conf., Jan. 27-29, 1984
FMA Executive Comm., March 9, 1984
FMA Board of Gov., March 10-11, 1984
FMA Annual Meeting, May 2-6, 1984
FMA Board of Gov., May 6, 1984
FMA Executive Comm., June 8, 1984
FMA Board of Gov., June 9-10, 1984
FMA Board of Gov. Fall Meeting, To be determined

Other Meeting Dates

AMA Interim Meeting, Dec. 4-7, 1983
AMA Leadership Conf., Feb. 23-26, 1984
AMA Annual Meeting, June 17-21, 1984
AMA Interim Meeting, Dec., 2-5, 1984

FMA Auxiliary Public Relations Program

Enthusiastically approved the FMA Auxiliary public relations activities to be carried out during 1983-84 and authorized financial assistance to the Auxiliary for developing a video tape presentation to be used in conjunction with a statewide media day scheduled for October. The Board commended the Auxiliary for this innovative program which is aimed primarily at focusing attention on the positive contributions that the physicians' family makes to the health and overall good of society.

Proposed Travel Seminars

Approved the following additional seminar for 1983 and medical travel seminars for 1984:

Colonial South Air/Sea Cruise - Oct., 1983 (7 days)

South Pacific Adventure - Jan./Feb., 1984 (15 days)

European Adventure - July, 1984 (14 days)

Far East Adventure - Sept., 1984 (15 days)

Mediterranean/Greek Isles Air/Sea Cruise- Oct., 1984 (14 days)

Complimentary FMA Journals

Approved a one year pilot program to provide a complimentary subscription to *The FMA Journal* to all senior medical students in Florida's three medical schools.

AMA GTE-Telenet

Authorized the FMA to offer to component county medical societies the opportunity to participate in the AMA/GTE Telenet program by serving as distributors at the local (county) level for the GTE-Telenet — Medical Information Network through contract with FMA. FMA currently serves as the statewide distributor for the network.

COUNCIL AND COMMITTEE REPORTS

COUNCIL ON LEGISLATION

1983 Legislative Session

The Board received an extensive report on the actions taken on major health issues by the 1983 Legislature. It was noted that the 1983 Session presented the most significant challenge that medicine has faced in many years, both from the number of anti-medicine issues as well as the imposing task of seeking major tort reform legislation. A complete report on health issues acted on by the Legislature will be included in a special issue of the FMA "Briefs" to the entire membership. The Board directed that an indepth review be conducted of the Association's future legislative posture on key issues effecting health care.

COUNCIL ON MEDICAL ECONOMICS

PMUR

Approved the Florida Medical Foundation's revised operating procedures for conducting the peer medical utilization review program for Medicare and Medicaid and plans for implementation of the program including the letter of understanding with the county medical societies.

COUNCIL ON MEDICAL SERVICES

Prescription Abuse Date Synthesis (PADS) Model

Requested the Council and its Committee on Substance Abuse to carefully review data developed by the state drug abuse task force on prescription drug abuse for use by state officials in advising sources of drug diversion and abuse to assure confidentiality, and further that a methodology be developed for identifying and referring impaired physicians to the FMA Impaired Physicians Program.

1983 HOUSE OF DELEGATES ACTIONS AND REFERRALS

The Board reviewed actions of the 1983 FMA House of Delegates referred to the Board for appropriate action or further consideration and took the following action:

Substitute Resolution 83-20 Liaison Committee to the Florida Physicians' Insurance Reciprocal

RESOLVED, That the Board of Governors establish a 5-member standing committee entitled the Liaison Committee to the Florida Physicians' Insurance Reciprocal. The Committee shall be composed of five members recommended by the Council on Specialty Medicine but not necessarily members of the Council and approved by the Board of Governors. All members of the Liaison Committee to the Florida Physicians' Insurance Reciprocal shall be insured by the Florida Physicians' Insurance Reciprocal. This Committee shall be constituted for the purpose of enhancing

member confidence in PIMCO and the Florida Physicians' Insurance Reciprocal. The Committee will hear members' complaints concerning PIMCO and the Reciprocal and will attempt mediation of these problems. The Committee may recommend policy to PIMCO and the Florida Physicians' Insurance Reciprocal. The Committee shall meet at least twice annually with the Board of Directors of PIMCO and the Florida Physicians' Insurance Reciprocal.

(BOARD ACTION)
Referred to the Florida Physicians' Insurance Reciprocal for implementation.

Resolution 83-10
PIMCO Review Committee

RESOLVED, That the review committee setup by the Florida Medical Association and its component medical societies to review appeals be composed of peers of the same specialty as the insured, where practical, when the Florida Physicians' Insurance Reciprocal chooses to settle a claim and the insured objects to such settlement.

(BOARD ACTION)
Referred to the Florida Physicians' Insurance Reciprocal for implementation in cooperation with FMA's component county medical societies.

Resolution 83-1
Loans for Treatment of Impaired Physicians

RESOLVED, That the Board of Governors develop and implement a mechanism by which the Florida Medical Association and/or the Florida Medical Foundation can serve as guarantors with local banking institutions to make loans available to members for the treatment of impaired physicians.

(BOARD ACTION)
Referred to the Florida Medical Foundation Board of Directors for implementation.

Resolution 83-3
Restoration of Coverage for Mental and Nervous Disorders

RESOLVED, That insurance benefits under FMIT for mental and nervous disorders be restored to the extent of the coverage previously offered by FMIT.

Resolution 83-4
Coverage for Addictive Diseases

RESOLVED, That the Board of Governors urge the FMIT to provide medical benefits for alcoholism and other addictive diseases.

Resolution 83-8
FMIT Psychiatric Benefits

RESOLVED, That the FMIT be directed to produce all the data in this matter for the scrutiny of any interested FMA members; and be it further

RESOLVED, That the Florida Council on District Branches of the American Psychiatric Association be consulted before there are any further changes in psychiatric coverage in insurance covering members of the FMA.

(BOARD ACTION)
Referred to the Trustees of the Florida Medical Insurance Trust (FMIT) for implementation.

Recommendation No. E-1
Resolution 83-15
Statewide Peer Review Organizations

RESOLVED, That the Florida Medical Association's House of Delegates, at the 1983 Annual Meeting, approve for implementation an FMA sponsored Peer Review Organization, and develop the program in concert with interested county medical societies.

(BOARD ACTION)
Referred to the Council on Medical Economics and the Committee on PRO for guidelines to be developed and report back to the Board of Governors at its fall meeting.

Substitute Resolution 83-7
Workers' Compensation Medical Fee Schedule

RESOLVED, That the FMA continue its efforts to obtain equitable fee differentials throughout the state and that the fees sought be equivalent to the usual and customary fees charged in the various communities; and be it further

RESOLVED, That if FMA is unsuccessful in achieving fee differentials under its present course of action, the FMA seriously study the possibility of litigation which would eliminate the present Workers' Compensation Medical Fee Schedule and instead provide reimbursement based upon usual and customary charges for such services as is done in 33 states; and be it further

RESOLVED, That FMA support the concept of regional differentials Workers' Compensation fee schedules for physicians practicing medicine in counties where the cost of living is higher than the average for the state of Florida.

(BOARD ACTION)
In keeping with the actions of the House of Delegates in adopting Substitute Resolution 83-7, the Board authorized the FMA to seek the Governor's veto on HB1277 and HB1103 passed by the Legislature and in the event that this is unsuccessful, FMA Legal Counsel was requested to explore other avenues which might be open to the Association in pursuing litigation to eliminate the present Workers' Compensation fee schedule and provide, instead, for reimbursement based on usual and customary charges.

Resolution 83-13
FMA President's Compensation

RESOLVED, That the Board of Governors review the reimbursement policies for the President of the FMA to reflect adequate compensation for time away from his practice.

(BOARD ACTION)
Referred to a sub-committee of the Board for review and recommendations.

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The July cover features the winner of the Editor's Award in the Seventeenth Annual FMA Auxiliary Benefit Art Show. The water color is entitled "Brahman Cow and Calf" and the artist is Janet N. (Mrs. Carlos) Heaton.

Dr. and Mrs. Heaton are residents of North Palm Beach.

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PRESIDENT'S PAGE

Unity and "caring care". . .



The 1983 legislative session has ended with strong indications there will be a special call session to resolve the issues concerning the funding for education in the state of Florida. The Annual Meeting of the American Medical Association concluded in Chicago June 23, 1983, with the House of Delegates having heard the President of the United States, Ronald Reagan, charge the American Medical Association to deal with the cost of medical care while preserving quality and access to the best health care system in the world.

Throughout the Florida Legislative Session, representatives of the Florida Medical Association continually had to defend health care costs, the "bad" doctor, the paraprofessionals' attempts to practice medicine, professional liability and tort reform and other very important issues. In the 1983 Florida Legislative Session alone, there were over thirty bills dealing with health care issues. No other profession has become so challenged.

In the meeting of the organization of state medical association presidents in conjunction with the meeting of the American Medical Association on June 17, 1983, every state medical association president reported similar problems in their respective state medical associations. Doctors are perceived as being primarily economically oriented, uncaring and concerned to the lesser degree about the health and welfare of their patients. Every state medical association is simmering in an alphabet soup of HMO's, IPA's, PCN's, PPO's, PRO's, DRG's and finally a recent addition to the list, CORF (Comprehensive and Patient Rehabilitative Facilities). None of us considered any of these issues when we chose to become a physician. However, the joy of practicing medicine in an independent, free society in which the quality of health care is unsurpassed has not prevented us from becoming depressed, angry, frustrated, tired, disorganized and apathetic. As a result, we as physicians are not sending the right signals to our patients. We are not perceived as having the best interests of our patients at heart. That we could be accused of suggesting an unnecessary operation for economic benefit to ourselves and that a lesser trained paraprofessional can be thought to be able to render the same care cheaper, faster and better are frustrating realities. And yet we as physicians seem powerless to correct the profession's image. Every state medical association is plagued with apathy from its members. T. Byron Thames, M.D., Past President of the Florida Medical Association, wrote in the President's Page in July 1980, "We are compelled to become involved. . ." Daniel L. Seckinger, M.D., President of the Dade County Medical Association wrote in *Miami Medicine* in June 1982, "We must become involved if medicine is to survive in the 80's." William Y. Rial, M.D., Immediate Past President of the AMA stated in his Presidential Address, "My thought today has been uttered at least a hundred times before. But let me say, for the 101st time, that increased professional unity, not only among members of our federation, but among all physicians in all specialties, is now more important than ever before. It's important to our profession as a profession, and it's important to the patients we serve."

The AMA Council on Long Range Planning and Development identified professional unity as one of the three major issues that will help shape the medical environment in the 1980's and beyond.

Senator Orin Hatch, Republican from Utah, told the AMA Leadership Conference in February 1983, ". . . you doctors can control the world if you would talk to your patients once in a while."

And so I say to you, my colleagues and friends, let us unite, work for the common good of our patients to provide "Caring Care", become involved in community affairs and communicate vibrance, enthusiasm, and genuine concern to all those who need our services. Each of us must challenge our colleagues who are not involved to get involved in the activities of their hospital staff, their community, their specialty, county and state medical associations. Together and united we can accomplish any good we desire to achieve and the public will be pleased.

The words of Sir Alfred Webb-Johnson taken from the *Medical Press* in 1946, are still true today. "The well-equipped clinician must possess the qualities of the artist, the man of science, and the humanist, but he must exercise them only in so far as they subserve the getting well of the individual patient. He must feel directly responsible to his patient, not for him — to someone else."



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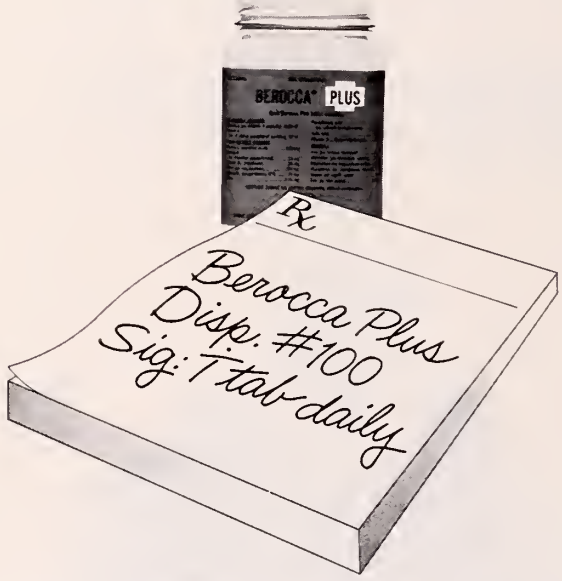
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Editorial, you remind us that morality, if it is to remain moral must be perpetually examined, cracked, changed and made new.

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Edward Pedrero Jr., M.D.
Tampa

On abstracts

The increasing acceleration of medical knowledge coupled with the resulting plethora of printed media makes selective reading by physicians a prerequisite for professional survival. Few practitioners need to be reminded of the invaluable advantage of being able to select relevant information. Accordingly, an examination of the scientific abstract for the reader and the author is in order.

The "abstract" is a summary of the principal points included in the article and alerts readers to the usefulness and applicability of subject matter. The abstract preceeds the article; it is brief, emphatic, and facts are logically presented. Several publications which serve as excellent sources of scientific information index abstracts for reference; e.g. *Biological Abstracts, Chemical Abstracts, Dissertation Abstracts, Excerpta Medica*, and *Psychological Abstracts.*

The author may find that requirements and restraints of writing the abstract present a problem as challenging as the article itself. Therefore, a few guidelines should assist the author in composition and the reader in comprehension. Although separate sections may not be clearly indicated, a scientific article presents the problem, describes a method, gives results, and draws conclusions.

A sentence or two about each of these four categories will typically suffice. Difficulty encountered in composing the abstract may indicate ambiguousness or redundancy in one or more sections. The abstract should be considered by the author as a final,

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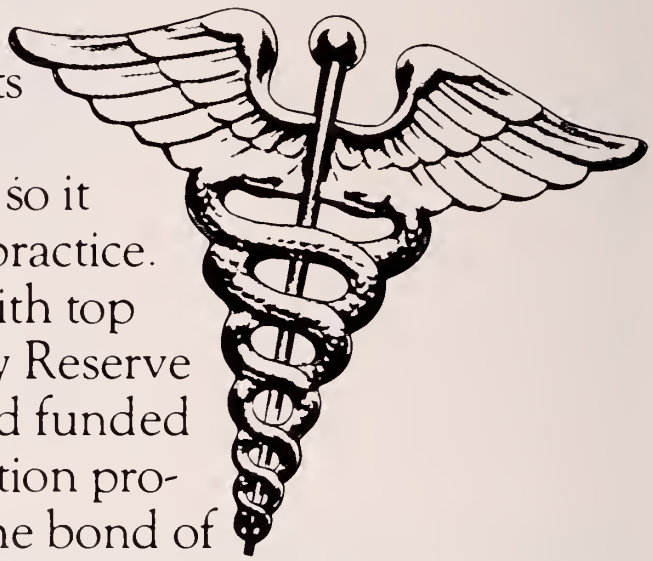
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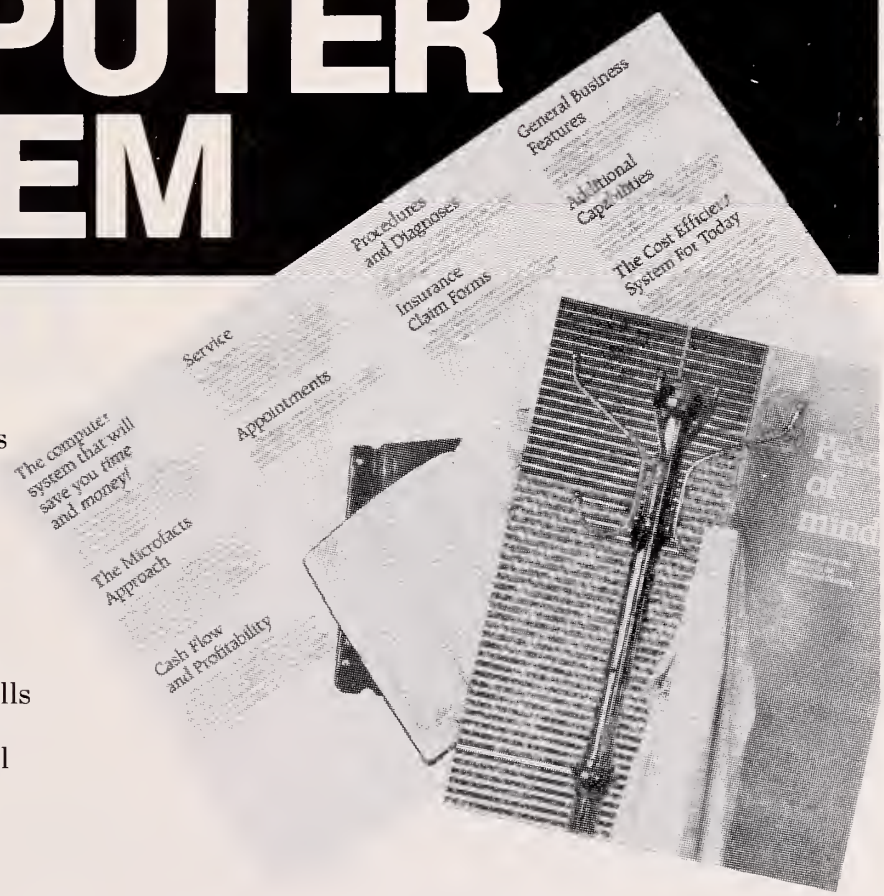
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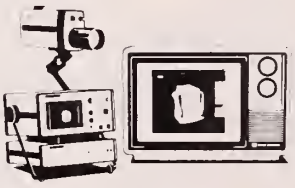
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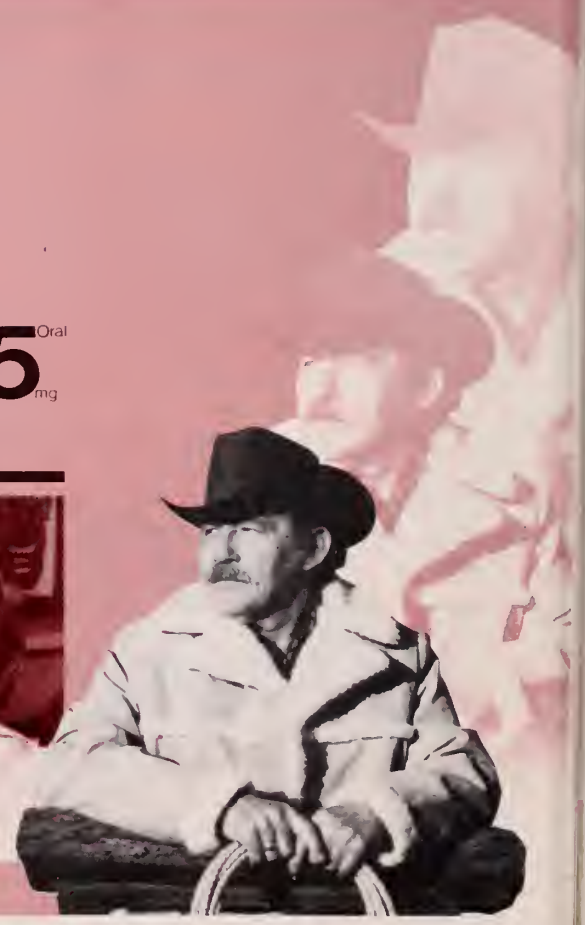
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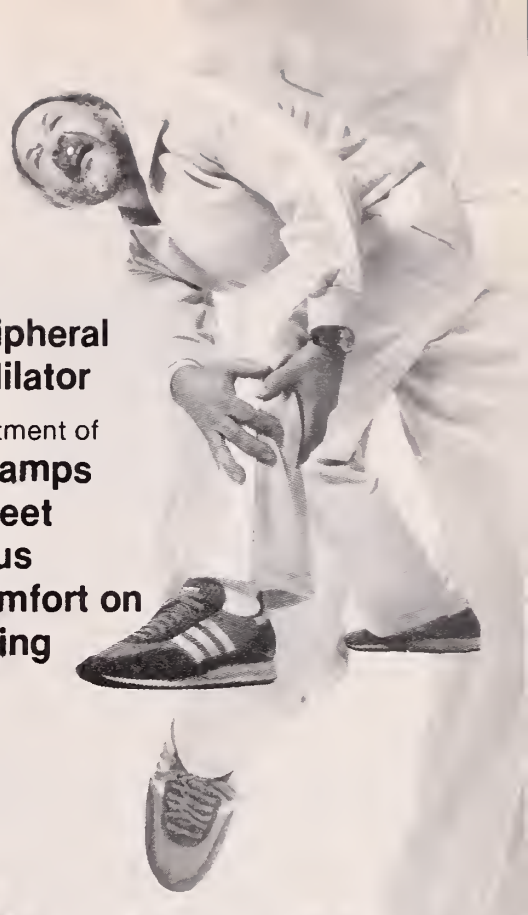
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Pyridoxine HCL (B-6) 10 mg.
in a special base of prolonged therapeutic effect.
DOSE: 1 to 2 tablets daily.
AVAILABLE: Bottles of 100, 500.

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Each yellow tablet contains:
Nicotinic Acid 250 mg.
Niacinamide 75 mg.
Ascorbic Acid.....150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2).....2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

LIPO-NICIN®/100 mg.

Each blue tablet contains:
Nicotinic Acid 100 mg.
Niacinamide 75 mg.
Ascorbic Acid.....150 mg.
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Pyridoxine HCL (B-6) 10 mg.
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Side Effects: Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

Contraindications: Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

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Address Phone

Occupation

Birthdate

St. Francis Hospital
ATTN: Community Relations
250 West 63rd Street
Miami Beach, Florida 33141

References

1. Stone PH, Turi ZG, Muller JE. Efficacy of nifedipine therapy for refractory angina pectoris. *Am Heart J* 104:672-681, September 1982.
2. Antman E, Muller J, Goldberg S, et al. Nifedipine therapy for coronary-artery spasm: Experience in 127 patients. *N Engl J Med* 302:1269-1273, June 5, 1980.

BRIEF SUMMARY
PROCARDIA® (nifedipine) **CAPSULES** For Oral Use

INDICATIONS AND USAGE I. **Vasospastic Angina** PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation; 2) angina or coronary artery spasm provoked by ergonovine; or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and or adequate doses of beta blockers.

II. **Chronic Stable Angina (Classical Effort-Associated Angina)**: PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS. Known hypersensitivity reaction to PROCARDIA.

WARNINGS. Excessive Hypotension. Although in most patients the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and or increased fluid volume requirements have been reported in patients receiving PROCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out. In PROCARDIA treated patients where surgery using high dose fentanyl anesthesia is contemplated, the physician should be aware of these potential problems and, if the patient's condition permits, sufficient time (at least 36 hours) should be allowed for PROCARDIA to be washed out of the body prior to surgery.

Increased Angina. Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal. Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure. Rarely, patients usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS. General: Hypotension. Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema. Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug Interactions. Beta-adrenergic blocking agents: (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PROCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers. The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS. The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing, each occurring in about 10% of patients; transient hypotension in about 5%; palpitation in about 2%; and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication. Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests. Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature.

HOW SUPPLIED: Each orange, soft gelatin PROCARDIA CAPSULE contains 10 mg of nifedipine. PROCARDIA CAPSULES are supplied in bottles of 100 (NDC 0069-2600-66), 300 (NDC 0069-2600-72), and unit dose (10x10) (NDC 0069-2600-41). The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77° F (15° to 25° C) in the manufacturer's original container.

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SPECIAL ARTICLE

Change and constancy in medicine

Jack W. Hickman, M.D.

I was indeed pleased to be asked to speak today at this tenth commencement of The College of Medicine. Reflecting back some thirteen years ago when there were six or eight of us sitting around a table with the charge to start a College of Medicine, I don't believe any of us looked forward to the tenth commencement. Our concerns at that time were "Can we have a *first* commencement?", "Can we even have a first day of classes?" Those were the immediate challenges at that point. Those days seem long ago, yet at the same time not very long ago.

I would like to present to you today a great number of brilliant new insights into the practice of medicine. I have worked arduously on that. I do not have them, I must tell you in advance. Perhaps I should apologize to you for this failure, but for reasons that will become clear later as we go along, I really will not apologize.

Among my duties it seems as if it is often my role to say those things which go without saying. This could bother some people. It doesn't bother me at all. I think that repetition, in selected instances, is not necessarily a vice. I sometimes feel as if I am like both Lennie and George in John Steinbeck's *Of Mice and Men*. Lennie would keep saying to George, "Tell me how it is gonna be, George". George would reply, "Lennie, I told you a hundred times", whereupon Lennie persists with "Yeah, but tell me again how we are going to have the farm, tell me about the rabbits". Well, I'll tell us all about the farm and the rabbits and how it is going to be once again, and this repetition doesn't upset me one bit.

First of all, it is my pleasure to welcome today's graduates to the profession of medicine. The class and I have discussed in the past the word "Profession". The poor word "Profession" has been much abused and corrupted. Everyone is said to be a professional this or professional that. I won't risk giving examples of how badly it has been corrupted but there is quite a different definition of the word by the late Mr. Justice Brandeis of the United States Supreme Court. In 1933, Justice Brandeis answered the question, "What separates a profession from other occupations?" Yes, I know it was fifty years ago, but I think the definition is as valid today as it was then. Brandeis made three points in his answer. He said, "A profession is an occupation for which the necessary preliminary training is intellectual in character, involving knowledge and to some extent learning, as distinguished from mere skill. Second, it is an occupation which is pursued largely for the benefit of *others* and not merely for one's self. Third, (and this is one I like), it is an occupation in which the amount of financial return is *not* the accepted measures of success."

A profession is...an occupation in which the amount of financial return is not the accepted measures of success.

If we can remain close to his definition we won't go very far wrong. Defining the profession we are all in, however, won't give us necessarily all the necessary guideposts for future performance in that profession. We have to look elsewhere rather than to just Brandeis' three points. Medicine is not a static profession. We will need to look at both changes and constancies in medicine.

My father graduated from medical school in 1912 — a good year — and at one point in the 1960's he was reflecting back on 50 years of the practice of medicine. He was a general practitioner — still not a bad term. He said, "when I look back, it was criminal when they turned us out to practice medicine in 1912 knowing what we knew at that time. We were a threat to the populace." Now, admittedly it is easier when you can look back, and have the new tools and advantages that you had in the mid-1960's as compared with 1912. Nonetheless, some of us, and some of you, will look back and reflect if we were not in similar straits.

The Author
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Change • It is usual at this point in an address to look forward to the challenges that you will face in the practice of medicine, see where they are, see how they will affect your lives and have the speaker offer solutions to those. Let's look at some of the changes you will see over the next fifty years or the next ten years. I will not attempt to name these and I will mention them rather quickly — the changes that we hear about today which confront us day in and day out in the practice of medicine.

You can't give this sort of talk without mentioning the knowledge explosion. The knowledge explosion has been talked about for decades and this is what my father was talking about, the new knowledge which is constantly ahead of us. The half-life of knowledge is another phrase which is frequently used. To be sure, we do all need to keep up with advances, but the change in knowledge isn't really anything all that new. My father was bothered about it in 1912; we are worried about it now. This change then, is an old friend. Well, if not a friend, it is an old acquaintance.

To be sure, we do all need to keep up with the advances, but the change in knowledge isn't anything all that new.

We are now told by experts that we shouldn't be graduating so many physicians anyway, because there is going to be a surplus of physicians in this country. Wonderful. Fifteen years ago we were told by experts that there weren't enough physicians. So much for the challenges and opinions of experts in forcasting the future. It is true that now one sees a greatly increased listing of medical practices for sale in the *Journal of the American Medical Association.* This procedure really hasn't been much in vogue since about the 1930's or into the early 1940's.

Because of the Federal Trade Commission's recent rulings against the American Medical Association, we are now told that we cannot restrict physician advertising as much as once was the case. So we are told that we are going to see advertising doctors. That too isn't very new. If you look in the 1910 issues of many city newspapers you will find advertisements for physicians all through them.

We are told that the structure of medicine is going to change greatly. I know that there are health maintenance organizations around us. There are schemes for preferred physician organizations, some hospital staffs are becoming closed, there are to be closed panels of physicians practicing as groups, and always on the horizon is the specter of national health insurance to be sure.

It is difficult to pick up the newspaper any day and not find some article about the rising cost of health care. This is indeed a valid concern, as are the others I have mentioned.

There is another challenge facing us. The malpractice crisis is back with us once again. The malpractice crisis comes, it goes away, it comes back again.

It is difficult to pick up the newspaper any day and not find some article about the rising cost of health care.

We now see the formation of "for profit" hospital corporations. A far cry from the time when it was considered quite unethical for any physician to serve on the Board of Directors of any hospital. How did this come to pass? What changes will this make in our practice?

Computers are on every street corner now. We are told that we need not waste all of our time with our patients because the computer can take and collate the medical history. It can collate all of the laboratory information. It will print out little numbers for me giving the test results on my patients. In case I don't have enough sense to either know the normal range for a serum calcium or don't have enough wit to look over on that side of the sheet with the normal ranges listed, it will print in for me "Hi" and "Low" so that I won't miss that. What a wonderful advance! The computer will also tell me, "Hickman, you can read EKGs but I can be programmed to read an EKG just as well as you can and print out the report in a *legible* fashion." These things don't bother me all that much either.

Along the same line, CT scanners, not long ago brand new, and now getting old. Nuclear Magnetic Resonance equipment, we are told, is to replace CT scanners, or at least forge into the front of aids in diagnoses.

That must be a list of ten or twelve changes and challenges. That should keep us busy. Why don't they bother me? If you reconsider them as a whole they are really dealing with only three major categories of change. The first one is that, yes, you need to keep abreast of knowledge to treat patients. Alright, there is nothing new about that. A second category has to do with the socio-economic area of the practice of medicine. The third category is that of advanced technology. I will suggest that these broadly socio-economic problems, in one form or another, have been present at least back to the turn of the century if not before. Technology has been with us for years. If you consider the discovery of Insulin, Penicillin, the first string galvonometers which were used to record electrocardiograms, the discovery of Radium, these too were technological advances. There will be future ones to come.

These three categories, as I see them, are not new threats. They are rather like old acquaintances, only they are dressed up in new clothes. They may not be ring spats, frock coats and wing collars anymore. They have changed to polyester and double knits, but we are seeing similar changes come around and around again. We will either solve them or we won't, but even if we do they will only be replaced by others. So, I really find that they are going to be recycled or mutated.

No matter what happens in the areas I have mentioned, still a physician is going to be seeing a patient and I think that is the bedrock on which the practice of medicine is built.

If you will let me engage in a bit of hyperbole, I will dismiss the changes out of hand. I won't deal with them any further. I have a very simple reason for that. No matter what happens in the areas I have mentioned, still a physician is going to be seeing a patient and I think that is the bedrock on which the practice of medicine is built. Given that, since I consider the simple doctor-patient relationship to be that essential to what you and I do day in and day out, year in and year out, I come to constancy.

Constancy • There must be some points of constancy on which you and I can build. Now, by constancy I do not mean just inertia or immobility. Inertia sits there passively like a rock. It may not move but it is just sitting there. Constancy however is sitting there with its toes dug into the ground. It is an active concept, not just a passive concept. Think of an unswerving dedication to principle. That is the sort of thing I am talking about with the term constancy. Faithfulness to verities, if you will. Constancy implies a steadfastness as the swirling winds of change, which I have mentioned, blow fitfully around it.

If we can pick out some points of constancy I think we are on a sounder foundation than paying too much attention to the changes which will be forever ahead of us.

Theodore Roosevelt, speaking in a different context to be sure, referred to "aggressive fighting for the right being the noblest sport the world affords." This implies a belief in basic principles and hanging on tenaciously for them. It is in a similar sense that I use the term constancy.

How many points can be brought out? I don't know. I have chosen four or five, four professionally for you and one personally for you which I think can serve us well. Most of these, too, the new graduates have heard before. Some of these also go without saying. I will say them.

Keep in mind that a sick person is not the same as a healthy person. Now most of us could have figured that out. The patient coming to see his physician because of an illness in the future, as I mentioned, is an anxious person. Furthermore, illness in itself makes the person egocentric. The patient is wondering, do I feel better now or do I feel worse than I did three minutes ago. If you have an earache you're worried about your left ear. Normally you don't think about your left ear, but this illness brings the whole world closely centered on the patient. That patient is not going to be the same as when you see him after he has recovered from that illness. There is a fear of the unknown that goes along with this. I had a patient some years ago who was extremely upset and concerned. Either directly or by indirection she clearly gave me the impression that she thought she would not survive her forthcoming operation. All medical logic said that she would. I talked to the surgeon and told him what the patient had expressed to me. I said, "How many of the patients you people (surgeons) operate on feel as if they are going to die?" He replied, being a surgeon — not always right but never in doubt — "Oh, 100%." I think he may have been right that at some emotional level the patient has that depth of concern. The person thinks, "They are going to put me to sleep and how do I know I am going to wake up." Well, that is a scary sort of thing. That person is not the same as when you meet him six months later in the supermarket or anywhere else. Illness also makes infants of us all in a way, particularly in the hospital setting. There is no question about that. Your clothes are taken away from you, your meals are brought to you. That person isn't the same one who is Chairman of the Board of the bank, or any other occupation that you want to name. Since these personality effects of illness are so widespread, we must remember to deal with our patients accordingly.

Illness also makes infants of us all in a way, particularly in the hospital setting.

This brings us to my second point, which relates to the above. It is simply that we must personalize our care as much as possible. This means the best care for that particular patient. It means treating patients and not illnesses. The physician who treats the "Colles' fracture" in Room 702 or the "Pneumonia" in Room 312 is going to be doomed forever to doing no more than just that. Furthermore, illnesses of and by themselves can be rather dull and boring. It is as they affect us and others that one learns about the effects on the person, and learns about the total person. Thus we need a specific care for a specific patient. If you ask me, "How do I take care of patients?" I can't tell you. If you ask me, "How do I take care of this patient?" then I can tell you. Our care must be individualized.

The third point in our list of constancies may be the hardest one of all to master. I would encourage you to develop a nonjudgmental attitude toward your patients. You will find patients who, of course, smoke too much, drink too much, eat too much — anything. They don't always take the medicine you prescribe for them. It is very easy for us to say, "Oh, he is a bad patient." No he isn't a bad patient. That is how life is sometimes, and the patients are not going to do everything we think is best for them. Our obligation is to inform our patients and give them the best advice we can. That is quite different from being judgmental about their behavior. A nonjudgmental attitude will aid in your overall effectiveness as a physician.

Another point which follows then is, "What results can I realistically expect for my patients?" I know what we want. We want to cure every patient. That is fitting and proper, but is it realistic? No. What then is realistic? Probably the best list of goals for physicians of which I know is inscribed on the statue of the reknown tuberculosis physician Dr. Edward Trudeau at Saranac Lake, New York. The inscription is in French, which I will not attempt with a Hoosier accent to handle for you but the translation is "To cure sometimes, to relieve often, to comfort always." We should be able to at least do that. I think these are still realistic goals for our own performance in our practice.

Oliver Wendell Holmes in "The Professor At The Breakfast Table" encouraged people to seek a physician who had a sense of humor, who had "a cheerful and serene countenance."

At about this point you may have two questions for me. One is, "Gee, I really like that advice. That is wonderful. I am so glad you gave it to me. If I follow it will I always succeed?" The answer unfortunately is "No." None of us have. You will be no different from the rest of us. I dearly hope you will, but the chances are you won't. What will this do to you? We cannot become chewed apart by the agonies of failure. That will destroy us. A good protection against this destruction is to maintain the "real you" in addition to being a physician. Please remember that you were a person before being a physician. You will continue to be a person. It would help if we could acquire what we are told to develop in our dealings with patients, and that is an attitude of detached concern, not emotional involvement. I like that phrase "detached concern", I am still working to master it. When I get there I will let you know, but it is not easy to do.

You can get help in maintaining yourself as a person by having fun. I know that some people consider "fun" a dirty word. I maintain that it is not and would encourage you to remember it. I would like to quote from a contemporary novel, "Still Life With Woodpecker" written by Tom Robbins, and I think I can say that no matter where you go in the country this year at no other commencement address will you hear Tom Robbins quoted. I say that without fear of contradiction. This author of "Even Cowgirls Get The Blues" and "Another Roadside Attraction" has a character in his novel — the woodpecker, who is a strange sort of redheaded fellow who goes around the country as a former bomber and outlaw. The author ends the book with a phrase I like, despite the woodpecker's occupation. He says, "It's never too late to have a happy childhood." I still like it. Some people may think that quotation is too flip a comment for a commencement address. I can understand their concern. But, I do have some people backing me up for a lightheartedness in our daily lives. Oliver Wendell Holmes in "The Professor At The Breakfast Table" encouraged people to seek a physician who had a sense of humor, who had "a cheerful and serene countenance." No less a person than Sir William Osler, who was the father of modern internal medicine, and the prestigious Regius professor of medicine at Oxford, made up a fictitous character. He invented Egerton Yorrick David. Dr. Osler, this man of international stature in medicine, would from time to time send off spurious writings to medical journals and sign them Egerton Yorrick Davis or E.Y. Davis or E.Y.D. At one point he even registered at a hotel where he and his wife were staying as E.Y. Davis and Mrs. Osler. Now, if Osler could do that, I can quote from Tom Robbins.

Your other question for me — remember, I said you might have two, is, "Am I always cognizant of these anchors of constancy in my practice and in my personal life?" You get the same answer as to your first question, "No." I try but I don't always succeed. That doesn't make the advice any less valid. I will still stand on it. The best I can do is to still continue to learn, as you are. I see us basically all on the same professional road. There are just some of us who are a few decades further down the road. We have learned where some of the pitfalls are. We still get into the pitfalls from time to time. Sometimes new pitfalls appear in the road which we didn't know existed. The most we can do is offer some sort of advice to you and hope that it help you.

I have only one other thing to give you today and that is my best wishes for both your personal and your professional success and satisfaction in the decades to come.

● Dr. Hickman, University of South Florida College of Medicine, Tampa 33620.

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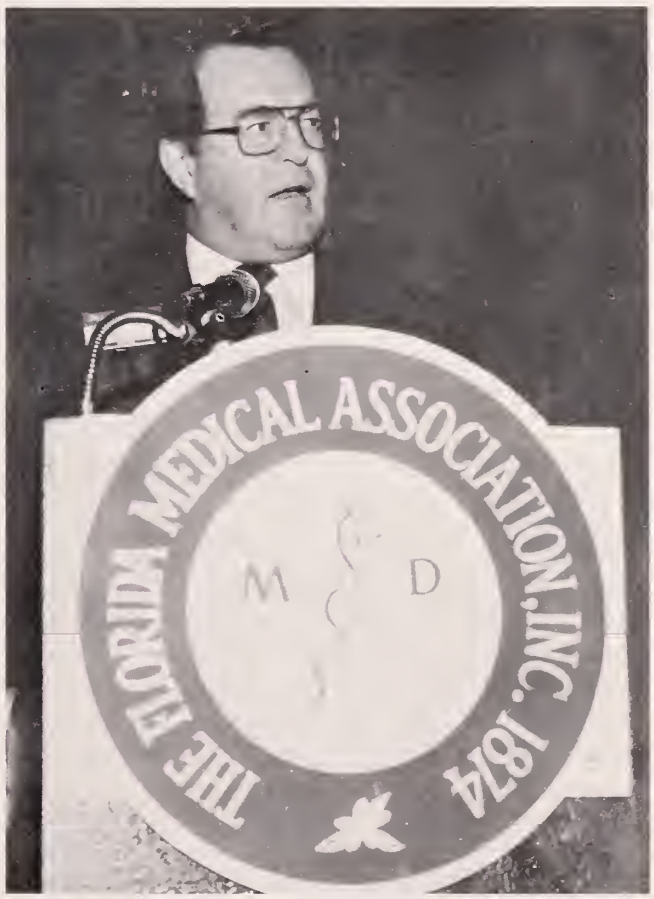
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One Hundred Ninth Annual Meeting Florida Medical Association, Inc. Hollywood, May 4-8, 1983

President's Address
Robert E. Windom, M.D.

Mr. Speaker, fellow officers, Delegates and distinguished guests, it is indeed an honor to have served in this position this past year and it is a pleasure to meet with you to provide a wrap up and bring you up to date as to where we are.

In order to have accomplished the things that we did, I had to spend some time away from home, and a lady who has stuck by me for almost thirty years tolerated it very well. I want you to meet my wife, Lelia, who has given me great support. I also want you to thank my office staff because when I am away people wonder why, and with all the questions this staff has to answer, I told them that their bonus would be that their names would be forever in the archives of Florida medicine. My staff is not here, but for Linda, Betty, Dotty, and Phyllis, I thank you. I d[illegible]ell them that I was going to give them a bonus at the end of the year, but they called me today and said the bank just closed my account, so as long as they know that you appreciate them helping me, they will be happy. Our local county medical society and my colleagues at home have supported me all these years. I thank them again as well as the doctors back home who covered me in my absence. You cannot carry on the job as President, in fact, you fail to carry on at all without depending a great deal upon the people who share the load and obligations with you. And to our committee members, our council members, our officers, our Board of Governors, who devoted many hours all year long, I extend to them a gratitude of thanks. And, of course, we as officers come and go but the bulwark of any organization is based upon the structure that exists year in and year out, and the quality of the staff that works for us all the time. As I said last year when I became President, we are now in the last segment of a term of up to 34 years that Dr. W. Harold Parham devoted to the FMA. I want you to recognize him and give him another round of applause. Dr. Parham knows more about Florida medicine than anybody else. We are going to miss him, but he has done well over the years to transfer to us much information and knowledge. We are grateful to have Don Jones at the helm right now. This past year he has demonstrated his ability very well, and I want you to stand up, Don. Most of his staff is here and they each worked very hard for us. Also, you heard Gloria Nunn and Priscilla Gerber thank their staff, officers, and members in the Auxiliary. You can see how we could not function without



Robert E. Windom, M.D., FMA President

their help in doing the things that you and I cannot do every day. The Auxiliary is behind us all the time, working hard to support our cause, and you and your members deserve every accolade possible, Gloria.

One hundred and nine years is a long time for Florida medicine, and those who practiced in the early days in Florida probably would never believe where we are today. We are presently ranked number six, I believe, in size among state medical associations. We know from all projections of Florida population growth that this state will probably be ranked second or third in the nation within our lifetime.

Professional liability and other issues • As we succeed and grow rapidly, even though we suffer growing pains, we have the strength of our county medical associations and societies which have continued to be very active on their homefront. This past year, we made visits to as many as possible and I think we visited the great majority of all county medical societies. We tried to bring you up to date with our major effort this year, the professional liability problem. Our Program of Reason is second to none because it is a compilation of the best expertise we could get from within the FMA, from non-physicians, and from state medical associations throughout the country. We have been before civic clubs, on radio programs, and many of you have participated in local television shows and other types of opportunities to get the message across to our fellow citizens.

One of the highlights of the year was to make visits to 20 newspaper editorial staffs in 14 Florida cities. We spent an hour or more with these people and I will tell you that when we got through with our message, they saw that they were misinformed on a great many points by the Trial Bar Association. We explained to them our position and did not ask them to go with us except to just write what is right and do what is right. We have had good coverage from the press as a result of these visits and we are hopeful that our program will get to the public in many more ways. We also visited our legislative delegation in Washington, D.C. to talk with our Congressmen and Senators from Florida and other states in an attempt to inform them of the problem facing the citizens of this country caused by the professional liability crisis.

This does not say that we have not focused on other important items. We have been to Tallahassee often and we maintain a staff there and people today are testifying for us before the state legislature. We have bills before this body that affect us, and we are trying to spend as much time and effort as we can legislatively.

FMA teleconference • Many of you participated in the teleconference we had just last week. This teleconference was viewed by over a thousand of our members throughout the state and, according to people who know this type of business, that was a remarkable turnout considering the fact that we had so little lead-time. This was a record in the history of satellite television putting on a program of this magnitude and getting the information to you. We are justly proud of that effort. What happened after that teleconference is still going on. There has been a tremendous response by you and your societies back home, working very hard to help solve our problem. So, I feel strongly that the floor of our "House of Medicine" made up of our county medical societies has indeed been loyal to us. The walls of the House, of course, are our state organization and I believe the strength there has been increased this year. As I called attention to the roof of our "House of Medicine" last year, only fifty percent of the doctors of the United States were members of the AMA, and in Florida it was about the same. I am particularly proud that over 3,000 members of the Florida Medical Association joined the AMA this past year, and I feel very confident that the new roof of our House is certainly now much stronger. We can be proud that we have three new seats in our delegation to the AMA which enhances the strength we have on the national level.

One of the doctors in Florida, responding to our telecast the other day to write letters, has already sent out over 3,000 letters. I want to mention his name; Dr. Poovambur S. Krishnamurthy from Perry, Florida has done this in the last week. Over 3,000 letters have come from his office to people in Tallahassee and to our committee members. Many of you here have written 100 or more letters. This is a good response to those who are considering our problem.

Call for FMA unity and involvement • You might say that things look rosy from what I have said so far. Well, I do have some concerns, however, and those concerns I think we must dwell upon for the moment. First of all, we still have a disinterest that prevails among many of our members. A disinterest for whatever reason, but for whatever it is, they are not concerned about the structure or the health of our organization. They have a degree of apathy toward involvement at various levels, and it seems they just do not want to be a part of our efforts. I think they have a political naivete because they do not realize that the political process is important for us. This process is vital because government at all levels is playing a major role in our lives as physicians. We have forwarded communications in every form possible to our membership during this year. The various circulars, newspapers, and news releases would probably total some two volumes if you put them all together. But again, somewhere on the bottom line, there is failure to return the information, or somehow it is not digested by many of our colleagues. I urge you as members of the House of Delegates to strengthen the

liaison with your local county society. When you hear a colleague say that the FMA is not doing anything or why are the doctors in Jacksonville not helping us, let them know what is going on and speak strongly for the FMA. When they speak out at a group meeting and say, "the FMA's not doing this, nobody's helping us," and other doctors hear that, we must counter and inform them properly. As you know, bad advice travels fast. So I hope that you will assume a stronger responsibility in this area.

Some have predicted that doctors are going to become nothing more than a group of technicians. I think that the dedication we had when we went to medical school prevails deep in our hearts, and we are going to continue practicing the *art* of medicine as well as the *science* of medicine. But I think sometimes we have to sit back, re-think the process, where we are going, and maybe rededicate ourselves to those purposes for the good of our colleagues.

There are some things that we can do to get back into what was started in 1949 here in Florida. A Committee for Better Government was established back then by the Florida Medical Association which later became our Political Action Committee. FLAMPAC was one of the first in the United States to show an interest by physicians to become involved in better government at all levels. I hope that we will reassess that goal and try to achieve it. I think that we can reactivate our involvement back home with more members and make them aware of what is happening on their behalf, and what is making it possible for them to continue practicing medicine even though we are bombarded by so much adversity in the newspapers.

Get involved in community organizations, whether they be civic clubs, school boards, or county commissions. Doctors need to play a part in these roles at home to let citizens know we are there to contribute more than just office or hospital care. We are there to concern ourselves with the health of the community and represent this profession through community involvement. And political involvement again is very important. I think we must speak out and let the public know what we are doing for them.

Public relations • Public relations is what the public get from other sources. Just yesterday in the *Miami Herald* one of the front pages of the second section exclaimed "Barbaric Cost of Health Care Deepens Illness." Examples like this are seen every day. It takes people like us to speak out strongly in defense because much of these bits of information are half-truths or not the truth at all. We must be able to demonstrate the good results of medicine for people and how we save their lives. You may have seen the other day in Tallahassee a group that organized to bring to the public all those who have suffered injury as a result of malpractice. But how would it be if we took all the patients up to Tallahassee whose lives have been saved and are living today because of the good services we gave them? I think we would find Tallahassee could not handle all those people. We have a handful of those who have suffered injury, can permeate the news and get into households throughout Florida, if we fail to do something to counteract it.

I was reading in the paper yesterday that Mr. Gerald Richmond is going to assume the office of President of the Florida Bar Association next month. One of his goals is this: To promise to lobby strenuously against any proposed reforms in malpractice litigation that would discourage aggressive representation of a grieved medical patient. Let us make it known that there is not one thing in our Program of Reason that has anything to do with slowing down the opportunity for anybody to have access to the courts. Each one of us knows that if we do harm an individual, we want that person to be recompensed and handled properly and as quickly as possible. We are not going to reduce lawyer incomes or make it difficult for them to make money. And we are not going to prevent indigent people from entering the court system. We are not saying that at all. We are just saying that rather than have economic rape of these disabled people by the windfall, which goes to attorneys, we are asking attorneys to charge a reasonable fee for their services. Just as we do for ours. And if there is a windfall above their fee let that windfall be a lesser percentage. So there is nothing we are doing to hinder this process that we all realize is so important. However, we hope that we can affect the process and get reason and justice into the system.

I believe that the quality of medicine may deteriorate in the future because those who follow us may not wish to go into high-risk specialties and perform the high-risk care we are able to provide. That is our main concern. The question is: "What's going to happen to future generations if some changes do not occur now?"

I think we can keep the pressure on. It is going to take each one of us, in our own way, to do it. I have always been a team player. I learned back in high school to play ball and a team only works well when everybody participates for the same purpose. Yes, we are going to have deviations away from the center, but we must get together to work for one common goal and it takes a team effort. I think that we will see victory ahead for medicine in Florida. We have a big job ahead, but I do not think anybody fails to have a big job each day to accomplish something new and maintain stability. I am counting on you and I am going to be with you as a part of this organization until I phase out with that last breath. But I am going to fight going forward rather than turn around and run

against the tide and let somebody take us over. I will do it with you and together we will succeed for the betterment of Florida medicine. Thank you for giving me the privilege of being your President this past year.

Recognition of Jere W. Annis, M.D. • I have one pleasant duty left to perform and I ask Dr. Jere Annis to please come forward to the podium. Jere, I know this is a little surprise for you because you were not plannning to be here this afternoon, but we got you here under a disguise and I want you to hear my presentation. This is the part I wanted you to hear. This is a resolution for the recognition of Jere W. Annis.

Whereas, Jere Wright Annis, M.D., of Lakeland, Florida, has rendered distinguished and able service to the medical profession, the citizenry of Florida, and the United States of America as a physician for 49 years; and

Whereas this dedicated physician was born in Minneapolis, Minnesota, on April 30, 1909, attended the University of Minnesota Medical School, and was graduated with a medical degree in 1934; and

Whereas the eminent gentleman was associated with the Minneapolis General Hospital, the Mayo Foundation, and the Watson Clinic in Lakeland, Florida from 1938 until his recent retirement in the practice of Internal Medicine; and,

Whereas Dr. Annis served in the United States Army Medical Corps for five years, and where he has served the American Medical Association in many capacities, including Vice Chairman and member of its Board of Trustees, and Chairman of the Board's Finance Committee, as a member of the Executive Committee, as Chairman of the Nominating Committee, as a member of the Council on Long-Range Planning and development, as a member of the Executive Committee Education and Research Foundation; and

Whereas Dr. Annis was a Delegate to the AMA for nine years, served on the Speaker's Bureau, Chaired the Committee on Computer Systems in Medicine, and was a member of the Ad-Hoc Committee on the Food and Drug Administration; and

Whereas this able leader served as President of the Florida Medical Association in 1958-59, served as Director of the Florida Medical Foundation, was Chairman of the Scientific, Judicial, and Legislative Councils, was Chairman of the Committee on Nursing; and

Whereas Dr. Annis is a life member of the FMA, is a past member of its Board of Governors, is a past Associate Editor of *The Journal of the Florida Medical Association*, is a past member of the Joint Committee on Medical Education, the FMA Advisory Committee to the Governor's Citizen Advisory Committee on Aging, and served as Chairman of the Florida Medical Commission for Better Government; and

Whereas he served as Director and Vice President of Blue Shield of Florida; and

Whereas Dr. Annis has served the Florida Heart Association as its Director, President, and Secretary, and as a member of five of its committees; and

Whereas he led the Polk County Medical Association as its President in 1953 and participated actively in its activities as Past Secretary and Trustee; and

Whereas Dr. Annis is a member of over sixteen professional organizations, is a Fellow of the American College of Physicians and the American College of Cardiology, and

Whereas he is active in many state and community service organizations; and

Whereas Dr. Annis has given freely of his time and talent to the medical community, the United States of America and to the People of the State of Florida, therefore, be it

RESOLVED that upon the occasion of his retirement from the active practice of medicine, Jere W. Annis, M.D., be recognized by the Board of Governors of the Florida Medical Association for his many years as an outstanding practitioner of medicine, and for his dedicated service to the medical profession.

Jere, we're very grateful to you for what you've done.

● Dr. Windom, 1750 Osprey Avenue, Sarasota 33579.

First House of Delegates

The First House of Delegates convened at 4:30 p.m. on Wednesday, May 4, 1983 in the Regency Room North of the Diplomat Hotel, Hollywood, Florida, with James B. Perry, M.D., Speaker of the House, presiding.

The House rose for the invocation which was given by Samuel M. Day, M.D., and remained standing for the pledge of allegiance.

Dr. Perry announced the membership of the Credentials Committee:

Fred S. Carter, M.D.
Robert E. McCammon, M.D.
Margaret C.S. Skinner, M.D.

The Delegates were reminded that they must register with the Credentials Committee before this and every meeting of the House of Delegates.

Dr. Carter, Chairman of the Credentials Committee, announced that 206 Delegates were present, representing 26 component societies, which constitutes a quorum.

A motion carried to seat Delegates.

Delegates

ALACHUA — O. Frank Agee, M.D.; Mark V. Barrow, M.D.; Thomas D. Bartley, M.D.; William B. Deal, M.D.; Mr. James Dolan; William T. Hawkins, M.D.; Douglas O. Jenkins, M.D; (Absent — Charles P. Gibbs, M.D.)

BAY — James T. Cook, III, M.D.; B. Philip Cotton, M.D.; (Absent — William G. Bruce, M.D.)

BREVARD — Hani M. Agrama, M.D.; Raymond A. Armstrong, M.D.; Walter A. Cerrato, M.D.; Brian P. Gibbons, M.D.; Francis S. Pooser, M.D.; Paul J. Popovich, M.D.; (Absent — Richard N. Baney, M.D.)

BROWARD — Herbert E. Brizel, M.D.; Walter Campbell, M.D.; Andre S. Capi, M.D.; Arthur L. Eberly, M.D.; Paul A. Falten, M.D.; Stanley S. Goodman, M.D.; Theodore W. Hahn, M.D.; John M. Harper, M.D.; William C. Hartley, M.D.; Alexander E. Molchan, M.D.; Jerry D. Moore, M.D.; Ray E. Murphy Jr., M.D.; Ernest G. Sayfie, M.D.; Marvin L. Stein, M.D.; Peter A. Tomasello, M.D.; Anthony J. Vento, M.D.; (Absent — Charles H. Bechert III, M.D.; Bruce B. Burgess, M.D.; David A. d'Alessandro, M.D.; Willis N. Dickens, M.D.; Kenneth H. Farrell, M.D.; Wilbur F. Helmus, M.D.; James A. Jordon, M.D.; David C. Lane, M.D.; Joseph M. Sachs, M.D.; Richard D. Schultz, M.D.; Herbert M. Todd, M.D.; Juan S. A. Wester, M.D.)

CAPITAL — Robert P. Johnson, M.D.; Nelson H. Kraeft, M.D.; George N. Lewis, M.D.; Robert N. Webster, M.D.; (Absent — Jack W. MacDonald, M.D.)

CHARLOTTE — Thomas R. Civitella, M.D.; Joseph R. Goggin, M.D.; Jaime Torner, M.D.

CITRUS-HERNANDO — Wilburn R. Jenkins, M.D.; Clinton J. McGrew, M.D.

CLAY — Clarence M. Harris, M.D.; William S. Bazley, M.D.

COLLIER — Charles S. Eytel, M.D.; Virgil A. Ponzoli, M.D.; Joseph F. Sullivan, M.D.

COLUMBIA — (ABSENT)

DADE — Duane E. Banks, M.D.; Virgilio I. Beato, M.D. Jerome Benson, M.D.; Valetine Bloch, M.D.; Robert E. Boyett, M.D.; Rufus K. Broadaway, M.D.; John O. Brown, M.D.; Victor O. Calderin, M.D., Harlan S. Chiron, M.D.; Richard C. Clay, M.D.; Vincent P. Corso, M.D.; DeWitt C. Daughtry, M.D.; O. William Davenport, M.D.; Joseph H. Davis, M.D.; Charles A. Dunn, M.D.; Richard J. Feinstein, M.D.; N. Ralph Frankel, M.D.; M. Felix Freshwater, M.D.; Richard J. Glatzer, M.D.; Edward E. Goldman, M.D.; Alan S. Graubert, M.D.; Julian H. Groff, M.D.; Joseph Harris, M.D.; James J. Hutson, M.D.; Donald E. Johnson, M.D.; Sean M. Kaufman, M.D.; Norman M. Kenyon, M.D.; Jesse G. Keshin, M.D.; Warren Lindau, M.D.; Carlos G. Llanes, M.D.; Simon E. Markovich, M.D.; Merton L. Miller, M.D.; Charles A. Monnin Jr., M.D.; Miguel A. Mora, M.D.; Dolores A. Morgan, M.D.; Sheldon D. Munach, M.D.; Joseph T. Ostroski, M.D.; Pedro A. Ramos, M.D.; Harry T. Remmer, M.D.; William I. Roth, M.D.; Oscar Sandoval, M.D.; Arnold F. Schild, M.D.; Daniel L. Seckinger, M.D.; Everett Shocket, M.D.; Margaret C. S. Skinner, M.D.; Douglas Slavin, M.D.; Marvin B. Slotkin, M.D.; John C. Turner, M.D.; Osvaldo D. Valdes, M.D., Harold H. Weiner, M.D., Steven M. Weissberg, M.D.; Edmund K. Zahn, M.D.; Sheldon Zane, M.D.; (Absent — Miguel Figueroa, M.D.; Ms. Ana I. Gonzalez; Maurice Laszlo, M.D.; Bruce Weissman, M.D.)

DESOTO-HARDEE-GLADES — (Absent Calvin W. Martin, M.D.)

DUVAL — Harvey E. Bernhardt, M.D.; Wilbert L. Dawkins, M.D.; Richard C. Dever, M.D.; William J. Garoni Jr., M.D.; Walter A. Harmon, M.D.; Charles P. Hayes, M.D.; Howard P. Hogshead, M.D.; Charles W. Lewis, M.D.; Kevin M. McAuliffe, M.D.; Charles B. McIntosh, M.D.; William Z. McLear III, M.D.; Faris S. Monsour, M.D.; Daniel B. Nunn, M.D.; Guy T. Selander, M.D.; William D. Walklett, M.D.; (Absent — Gaston J. Acosta-Rua, M.D.; Mohamed H. Antar, M.D.; John F. Lovejoy, M.D.; Robert H. Threlkel, M.D.; James W. Walker, M.D.)

ESCAMBIA — Richard H. Ciordia, M.D.; Charles J. Kahn, M.D.; Charles F. McConnell, M.D.; Michael R. Redmond, M.D.; F. Norman Vickers, M.D.; Robert K. Wilson Jr., M.D.

FLAGLER — John M. Canakaris, M.D.

FRANKLIN-GULF — Joseph P. Hendrix, M.D.

HIGHLANDS — Luis M. Pena, M.D.; (Absent — Carolos J. Gonzalez, M.D.)

HILLSBOROUGH — Richard A. Bagby, M.D.; Francis C. Coleman, M.D.; Emilio D. Echevarria, M.D.; Irving M. Essrig, M.D.; Mr. Alex Gross; Glenn S. Hooper, M.D.; Robert G. Isbell, M.D.; Victor H. Knight Jr., M.D.; Thomas E. McKell, M.D.; Robert E. McCammon, M.D.; J. Robert Qualey, M.D.; William W. Trice, M.D.; Ferdinando Vizzi, M.D.; James A. Winslow Jr., M.D.; (Absent — Richard G. Connar, M.D.; John C. Fletcher, M.D.; Ralph E. Rydell, M.D.; Harold L. Williamson, M.D.)

INDIAN RIVER — Donald L. Ames, M.D.; K. Gordon Kelso, M.D.; Paul A. Graham, M.D.

LAKE — Joseph Comfort, M.D.; Robert H. Hux, M.D.; (Absent — Joseph E. Holland, M.D.)

LEE — Cecil C. Beehler, M.D.; Larry P. Garrett, M.D.; Francis L. Howington, M.D.; H. Quillian Jones Jr., M.D.; Joseph P. O'Bryan, M.D.; Stephen R. Zellner, M.D.

MADISON — (Absent — Melvin H. Thomas, M.D.)

MANATEE — Thomas R. Busard, M.D.; Julian Giraldo, M.D.; James T. Rogers Jr., M.D.; (Absent — Roger A. Meyer, M.D.)

MARION — Claude B. Henderson, M.D.; James L. McLaughlin, M.D.; Samuel L. Renfroe, M.D.

MARTIN — Fred S. Carter, M.D.; (Absent — Charles A. Fraraccio, M.D.)

MONROE — (Absent — Robert D. Carraway, M.D.; Ronald H. Chase, M.D.)

NASSAU — (Absent — Cecil B. Brewton, M.D.)

OKALOOSA — David R. Arrowsmith, M.D.; Samuel M. Atkinson Jr., M.D.

ORANGE — Edward Aekerman, M.D.; Clifford D. Bidwell, M.D.; Clarenee H. Brown III, M.D.; Manuel J. Coto, M.D.; William E. Hoffmeister, M.D.; Angelo Massaro, M.D.; Joseph G. Matthews, M.D.; Heetor R. Mendez, M.D.; Louis C. Murray, M.D.; Calvin R. Peters, M.D.; James F. Riehards Jr., M.D.; Robert N. Serros, M.D.; Edward W. Stoner, M.D.; Robert B. Trumbo, M.D.; Cecil B. Wilson, M.D.; (Absent — Charles D. Price, M.D.)

OSCEOLA — Gilberto Perez, M.D.

PALM BEACH — Vernon B. Astler, M.D.; Elizabeth J. Baricc, M.D.; Richard C. Cavanagh, M.D.; John D. Corbitt Jr., M.D.; Lee A. Fischer, M.D.; James R. Forlaw, M.D.; Luis R. Guerrero, M.D.; James M. Johnson, M.D.; V. A. Marks, M.D.; Stephen N. Martyak, M.D.; James F. Smith, M.D.; Dick L. Van Eldik, M.D.; (Absent — Ralph R. Eastridge, M.D.; Roger D. Petersen, M.D.; William J. Romanos Jr., M.D.; Ben R. Thebaut Jr., M.D.

PANHANDLE — Herbert E. Brooks, M.D.; (Absent — James T. Cook Jr., M.D.)

PASCO — Robert D. May, M.D.; (Absent — Herman R. Reno, M.D.; Randall D. Sells, M.D.)

PINELLAS — Robert L. Dawson, M.D.; Charles K. Donegan, M.D.; John Flint, M.D.; Jose Galvez, M.D.; John M. Hamilton, M.D.; Kay K. Hanley, M.D.; Harold L. Ishler Jr., M.D.; David Jones, M.D.; Morris J. LeVine, M.D.; Jaek A. MaCris, M.D.; Donald G. Nikolaus, M.D.; Rex Orr, M.D.; David T. Overbey, M.D.; Bruee P. Smith, M.D.; Walter H. Winehester, M.D.; (Absent — William W. Atkinson, M.D.; Thomas M. Daniel, M.D.)

POLK — Thomas M. Caswall, M.D.; John W. Glotfelty, M.D.; Thomas E. McMieken, M.D.; John C. Moore, M.D.; Robert B. Peddy, M.D.; (Absent — Ronald W. Case, M.D.; Saul B. Gerber, M.D.; Wiley E. Koon, M.D.)

PUTNAM — (Absent — Roy E. Campbell, M.D.)

ST. LUCIE-OKEECHOBEE — Charles R. Cambron, M.D.; David L. Fromang, M.D.; (Absent — William H. Meyer Jr., M.D.)

SANTA-ROSA — D. Bruce Young, M.D.

SARASOTA — Kenneth C. Kiehl, M.D.; Martin F. Mihm, M.D.; Douglas R. Murphy, M.D.; Franklin H. Pfeiffenberger, M.D.; Richard C. Rehmeyer, M.D.; Karl R. Rolls, M.D.; David L. Thomas, M.D.; (Absent — John N. Carlson, M.D.)

SEMINOLE — Luis M. Perez, M.D.; (Absent — Orlando Garcia-Piedra, M.D.)

SUWANNE-HAMILTON-LAFAYETTE — (Absent — Alex Kish, M.D.)

TAYLOR — John H. Parker, M.D.

VOLUSIA — Grandy B. Barnard, M.D.; Martin S. Feigenbaum, M.D.; Alvin E. Smith, M.D.; Richard W. Snodgrass, M.D.; (Absent — Remigio G. Laesamana, M.D.)

WALTON — James D. Lawlor, M.D.

WASHINGTON — (Absent — Sheikh M. Ilyas, M.D.)

SPEAKER — James B. Perry, M.D.

VICE SPEAKER — Franklin B. McKechnie, M.D.

A motion carried to adopt the Rules and Order of Business as listed in the Handbook:

Information for Delegates

The Rules and Order of Business for the House of Delegates are included in this Handbook.

Delegates and alternates whose names appear in this Handbook have been certified by their county medical societies. Our Bylaws do not permit an alternate to serve for a delegate who has once been seated. **The Bylaws require that delegates fill out attendance cards at each meeting of the House of Delegates in order to be credited in attendance,** and further, the chairman of the Credentials Committee is required to report to the House the number of delegates who have registered their attendance cards, thus eliminating the necessity of a roll call to seat delegates.

Your attention is called to the format of the Annual Meeting, where the Reference Committee meetings will be held in the morning following the First Meeting of the House. All reports and resolutions will be referred to Reference Committees by the Speaker at the First Meeting of the House of Delegates. All members who are interested in any committee report or resolution should attend the Reference Committee meetings where a full discussion will take plaee. Counеil and committee ehairmen are respectfully requested to be present and diseuss their respective reports. All members of Reference Committees are urged to study carefully the reports and resolutions referred to them. The chief purpose of the Reference Committees is to allow an opportunity for as many members of the Florida Medieal Assoeiation as possible to appear and be heard and thus have a voice in the business of the Association. In addition, discussions before the Reference Committees have the added advantage of avoiding long discussions at the meetings of the House of Delegates. Members may requcst the Reference Committee chairmen to defer items in whieh they are interested in order that they may be present to discuss the subject.

All resolutions **must have a sponsor present before the Reference Committee.** Resolutions must be filed by 12:00 noon on the day of the First Meeting of the House of Delegates, typewritten and in proper form. The resolutions so presented will be available for distribution by the time the First House convenes. Only the "Resolved" portion of the resolutions will be adopted as policy.

All Reference Committee reports will be duplicated and available to the delegates at the Registration Desk on Saturday morning. We trust these provisions will result in an effieient and informed House of Delegates.

All reports and resolutions included in this Handbook, (as well as the reports of the Reference Committees) have been printed on colored paper for easy reference. This color code is as follows:

Reference Committee No. I — Green
Referenee Committee No. II — Buff
Reference Committee No. III — Blue
Reference Committee No. IV — Pink
Reference Committee No. V — Goldenrod



Speaker of the House James B. Perry, M.D. (standing) calls the Delegates to order. Seated at the head table (left to right) are: Executive Vice President W. Harold Parham, D.H.A.; President Robert E. Windom, M.D.; Treasurer Yank D. Coble Jr., M.D.; Vice Speaker Franklin B. McKechnie, M.D.; President-Elect J. Lee Dockery, M.D.; Vice President James F. Richards Jr., M.D.; Secretary Luis M. Perez, M.D.; and Immediate Past President Sanford A. Mullen, M.D.

According to our Bylaws, nominations and seconding speeches shall be limited to a maximum of two minutes each. If additional information needs to be presented, it should be duplicated and distributed to members of the House.

Your Speaker and Vice Speaker are available at any time to help in any way in the preparation of resolutions or in any capacity in which they might help any member of the Florida Medical Association.

A motion carried to adopt the Minutes of the 1982 House of Delegates as published in the July 1982 issue of *The Journal of the Florida Medical Association.*

The Speaker introduced the officers of the Association: Franklin B. McKechnie, M.D., Vice Speaker; J. Lee Dockery, M.D., President-Elect; James F. Richards Jr., M.D., Vice President; Luis M. Perez, M.D., Secretary; Yank D. Coble Jr., M.D., Treasurer; Robert E. Windom, M.D., President; Sanford A. Mullen, M.D., Immediate Past President; W. Harold Parham, D.H.A., Executive Vice President.

Dr. Perry advised that during the past year a number of FMA members had departed this life. In memory of these physicians, roses had been placed in the vases at each end of the Speaker's podium. Dr. Perry asked that the House observe a moment of silent prayer in respect and memory of these members.

Remarks — Speaker of the House

Ladies, gentlemen, guests, colleagues, fellow delegates, officers, and friends: Welcome to the one-hundred and ninth meeting of the Florida Medical Association.

It seems that in the last fifteen years our problems get more complicated and the issues more complex on a day to day basis.

As time progressed, we have fought and been fought with Medicare, then Medicaid, PSRO's, reviews, certificates of need and now diagnostic related groups and proposed payment schedules are in the offing. PPI now present in California is the harbinger of squabbles that pit doctor against doctor and doctor against hospital. Our professional liability situation and its related tangents is a thorn in our side. Much of this may be caused by our own complacency and a public which perceives us in less than a favorable light. Many of our colleagues, unfortunately, are insensitive, overcharge, or have a demeanor often undoing thousands of man hours of good in just a few moments.

Solutions to these problems do not seem to be forthcoming. The offshoot of this could be complete capitulation, forcing upon us total socialization or perhaps structuring our entire profession from what we have known it to be in the past. On the other hand, perhaps we will become more educated, overcome our adversaries and have a greater strengthening of our own moral fiber and a resilience to always perservere. Perhaps our greatest problem is our collective reluctance to address our own shortcomings and solve them in an equitable, fair and ethical fashion. Many people have said that the road to righteousness and freedom is never easy, and eternal vigilance has been historically the watchword of our lives.

At this time I should like to encourage the House of Delegates at this meeting to function efficiently, effectively, and with a great deal of decorum and in a business-like fashion.

FMA Bylaws require delegates to fill out attendance cards at each meeting of the House to be credited in attendance. The Chairman of the Credentials Committee is required to report to the House the number of delegates registered, thus eliminating the necessity of a roll call to seat delegates.

Our deliberations in the House, as well as the Board of Governors and all Councils and Committees, are governed by parliamentary usage as contained in Sturgis' Standard Code of Parliamentary Procedure. This will prevail unless otherwise provided by Florida Medical Association Charter or Bylaws, or unless waived or modified by a two-thirds vote of the members present at any Session of the General Assembly or meeting of the House of Delegates.

Each of you as a delegate is an official of the Florida Medical Association. Collectively, you act as spokesmen and a voice of more than 14,000 Florida Medical Association members. We encourage all of you to have active participation in the debate during the course of the hearings which are so important and vital to our Association. The participation requires a significant amount of time, but the personal satisfaction of carrying out this responsibility, the representation of your friends and colleagues makes it well worthwhile. This year, as last, the Reference Committees are expanded to include extra members as well as Chairman. All may participate in deliberations and be seated on the podium during the Committee representation and reports. Only five may vote. The reason for the extra is that we need more people intimately involved in the decisions entrusted to these Committees. The additional input is beneficial, the training and exposure given the individuals who are picked enables them to become more intimately associated with the affairs of the organization and the necessity of evaluating pros and cons of the various issues is paramount.

At some time or another there are necessary absences. The increased number of members tends to avoid as much as possible personal stress on the remaining members and allows for a true concensus.

It is likely that items of interest in a different Reference Committee could be created by a time conflict. Inasmuch as possible, this will be worked out on an individual basis by contacting the Chairman of the respective reference committees. Each committee has a senior staff person as well as recording secretary and an AMA delegate to monitor, give advice, provide technical information, or whatever. Council chairmen are to be responsive to the needs of the reference committees discussing their actions and activity over the year and be prepared to complement the discussions and give applicable information to the committee members as well as other people attending the hearing. This information is vital to them as it helps all of us to be better informed and have a more pertinent discussion.

After the hearings are concluded, the reference committees will go into executive sessions to prepare their reports. The reports of the reference committees will be presented in final written form to the staff for duplication by Friday at noon. There will be a limited number of copies of these reports available to each county medical society delegation by mid-afternoon on Friday.

In an effort to clarify the double negative, the Speaker and Vice Speaker would like to suggest that in the event a reference committee does not recommend the approval of an item, the report should read "disapproval". In this case, when the original item is before the House, the Reference Committee then recommends that you vote "no".

An innovation requested by many of the county delegations in the past was well implemented and effective last year. This will be carried out and enable a member from a county delegation to go over the first drafts of the reference committee reports with the Speaker or Vice Speaker as early as Thursday afternoon or Friday morning, whenever they are available.

By Saturday morning all of the reports will be available to all of the delegates and these will be taken up during the second and third meetings of the House.

In an effort to expedite the meeting of the House, it is hoped that detailed discussions will take place in the reference committee hearings. We know that every delegate has the opportunity and privilege of discussing any item at any time that the reference committee makes the recommendations to this House. We do not want to inhibit discussion but the necessity of concise and pertinent remarks is preferred and the basic philosophy must always be the majority rule; but minority will always have the opportunity to be heard.

I should like to encourage all members of the Association to participate actively in the reference committee hearings. Obviously this is not possible, but we do need a consensus and useful dialogue should be carried out so that the committees can come forth with a loud clear common voice; the opinion of the majority, and this should be so stated.

Hopefully, you will all enjoy yourself and with God's blessing we would like to succeed in having a successful meeting beneficial to everyone.

Thank you.

The remarks of the Speaker of the House of Delegates were referred to Reference Committee No. III for consideration.

Dr. McKechnie, Vice-Speaker, introduced Mrs. Daniel B. Nunn, President of the Florida Medical Association Auxiliary. Mrs. Nunn expressed the thanks of the Auxiliary to members of the Association for their support during the past year, and outlined some areas of Auxiliary service to the Association.

Presentation by Auxiliary President, Mrs. Daniel B. Nunn

Mr. President, Officers of the Association, Delegates, Ladies and Gentlemen: This has been a super year for the Auxiliary.

The Florida Medical Association Auxiliary, originally named the Woman's Auxiliary to the Florida Medical Association, was founded in 1926. Mrs. Wilburn Lassiter of Gainesville was elected the first President. To quote Mrs. Lassiter, "May 5, 1926 is a date which remains in our memory as the first step in Florida to bring together the wives of our splendid men whose life work is dedicated to aid mankind through the efforts of their chosen profession. We came into their lives as sweethearts, wives and homemakers while now we have the added pleasure of aiding them in their profession through our newfound family group, the Woman's Auxiliary." Eight years later, FMA President William H. Rowlett made the following remarks in an address to the Woman's Auxiliary:

> How well I remember when they first began to talk about the Woman's Auxiliary in our State Association. No one seemed to know very much about it and they all seemed very timid about its possibilities. We finally decided to give it a trial. As one of our members expressed it, he was willing to try anything once.

This is your FMA Auxiliary 1983. We are a volunteer organization of 6,000 physician spouses united by a common bond for a common goal to improve the quality of life for all people. FMA Auxilians are people who choose to put their talents and abilities to work implementing programs to meet community needs, such as health career projects, child abuse programs, safety programs, learning disabilities, organ donations, breast self-examinations, aging, substance abuse, screening for medical infirmities. All of these are ongoing projects developed at the county level. The Auxiliary brings members' talents and expertise together with community needs through a variety of activities. Auxiliary legislative activities support community programs through education, letter writing and personal contact. We work for sound legislation to provide for better health programs and care. One important facet

of this work is our LEGS Alert System. It is a pyramid-like network which enables members to respond quickly to issues in the state and federal legislatures. Days at the Capitol are learning experiences as Auxiliary members meet legislators, hear them speak and see the legislative system at work. To ensure continuing quality medical care, the FMA Auxiliary supports the AMA-ERF by raising funds. State fund raising activities include the sale of T-shirts, holiday sharing cards and the Annual Arts and Crafts Show. Fund raising in the counties is limited only by the members' imaginations.

This year the FMA Auxiliary has raised over $100,000 for AMA-ERF. We consider this fund raising just one more service to the profession and our communities because it ensures quality education for physicians, up-to-date equipment for medical schools and thus good health and medical care for every citizen.

The FMA Auxiliary supports the Florida Medical Foundation with fund raising projects. This year we sold citrus with a profit of $8,600. We had designated these funds to be used for the Impaired Physicians Program.

The Auxiliary has produced a cookbook entitled, "*RX (Prescription) for Fine Dining.*" The cookbook, published October 1, 1982, is a compilation of old family recipes from medical families throughout the state. Proceeds from the sale of the first editons go to international health activities. For personal development, the FMA Auxiliary offers its members free educational and leadership training, such as seminars on time management, parliamentary procedure, financial planning and professional marriages. National speakers are frequently available and spring workshops include AMA-ERF legislation and membership. Each year there is a leadership conference for state and county leaders. There is the opportunity to attend national training workshops. The Annual Meeting of the FMA Auxiliary House of Delegates gives every member a chance to shape policy and programs. AMA Auxiliary delegates attend the Annual Meeting in Chicago. All FMA Auxiliary members receive publications written especially for them. *The Quarterly*, the official FMA Auxiliary magazine, is published four times a year.

Other activities include, Doctor's Day observance on March 30th, the Auxiliary Special Issue of *The Journal of the Florida Medical Association*, this year featurin learning disabilities.

We know that the strength of the FMA Auxiliary is through its members in shared concerns, in a unified voice, in a positive image for medicine. Our services to the medical profession and our communities take various forms, from planning and implementing community programs to working on legislative activities, to raising funds, to developing our own management, organizational and creative skills. Through our activities we believe we are supporting the medical profession by assuring quality health and health care for all the people of Florida and, "We've Only Just Begun."

It has indeed been a privilege and pleasure to serve as President. I wish to thank the Auxiliary, Dr. Windom, the Board of Governors, Mr. Don Jones and Dr. Harold Parham for all of their support.

Thank you very much.

Dr. McKechnie then introduced Mrs. S. Bruce Gerber, President-Elect of the FMA Auxiliary; Mrs. Mylie E. Durham, Jr., Southern Regional Vice President, AMA Auxiliary; Mrs. B. David Epstein, Southern Regional Director, AMA Auxiliary; Mrs. Robert Andrews, First Vice President, Southern Medical Association; Edward R. Annis, M.D., Past President of AMA; and Rufus K. Broadaway, M.D., AMA Trustee.

Mrs. Mylie E. Durham thanked the Speaker and members of the House for inviting her to attend the Annual Meeting on behalf of the AMA Auxiliary.



Auxiliary President Mrs. Daniel B. (Gloria) Nunn addresses the FMA House of Delegates.

Dr. Perry introduced the President, Dr. Robert E. Windom. Dr. Windom addressed the House (a text of Dr. Windom's remarks appears elsewhere in this issue of *The Journal*).

At this time Dr. Windom recognized Dr. Jere W. Annis with accolades and a gift upon his retirement from the active practice of medicine, for his many years as an outstanding practitioner of medicine and for his dedicated service to the medical profession. Dr. Annis expressed his heartfelt thanks to the Board of Governors and the House.



Jere W. Annis, M.D., of Lakeland, a Past President of FMA and former member of the Board of Trustees of the American Medical Association, retired from active practice earlier this year. FMA President Robert E. Windom, M.D., helps him display the wristwatch he was presented during the House of Delegates in recognition of his many years of service.

Dr. Perry then recognized W. Harold Parham, D.H.A., Executive Vice President, to give the Annual Report of the Florida Physicians' Reciprocal.

Remarks — W. Harold Parham, D.H.A. FMA Executive Vice President and President Florida Physicians' Insurance Reciprocal

Thank you, Mr. Speaker. As most of you remember, when the Reciprocal or the insurance mechanism was authorized by the House of Delegates at its meeting in 1975, it was requested at that time that each year you be given an annual report. Now you have this Report inside of your Delegates' Packets. It is the 1982 Annual Report of the Reciprocal and in the essence of time, I am only going to cover two or three high points of the Report which should be of interest to you.

Our income for last year was approximately $37 million. This is on the back page of your Report that is in your packet, the Summary on the back sheet. Our reinsurance premium was $19 million. Now $7 million of this was not for premiums for last year but premiums for reinsurance for previous years where claims had gone sour and we owed the reinsurers additional funds under our retro swing. Now our net premiums for the year when we finished paying for the reinsurance and retro insurance was $17 million. We had direct claim losses of indemnity and claims expense of $25,500,000 which left us $11 million in the hole for last year, which was a tremendous amount of money. We had an investment income of approximately $6.8 million net for the year, and we ended up the year with the company with a $4.5 million loss for 1982. It is quite obvious you cannot stay in business in this manner. Two years ago we had an increase of 26%, last year 30%, and this year another 30%, which adds up to a tremendous amount of premium increase; and if anybody tells you that there is not a professional liability crisis in this state, and it is not going to get worse in the next two or three years, they're just crazy.

Now, the CPA Audit Reports will be available at the Reference Committee III tomorrow, as they have been ever since we formed the company. Also, the Statutory Report which goes to the Insurance Commissioner will be available for you tomorrow. I just want to mention to you basically what your Board sees as what is creating this tremendous difficulty. The two-year study that the Board has conducted very intensively on this subject deals primarily with large claims. They are getting larger and larger and more and more frequent and primarily the cause of it is suits on newborn infants. In December alone, we had $7 million in losses and $4 million of it is attributable to brain damaged babies. So, that is where the plaintiffs' attorneys are having their heyday and digging the gold mine. I think most of you read Dr. Davenport's study that was conducted by the Florida Society of Obstetrics and Gynecology and included members of the Florida Chapter, American College of OB/GYN which revealed that 25% of the obstetricians in Florida have discontinued obstetrics and 25% plan to do so in the immediate future. As I recall, the figure was 69% that gave up the practice of obstetrics primarily due to the liability problem. Now, this is a giant step backwards rather than forward.

The Board itself has had to spend a tremendous amount of time, as I mentioned a minute ago, particularly on the large claims. Reviewing these claims, going into depth, being certain that the proper consultants are chosen and matters of that nature, particularly to try to orchestrate the defense of the serious claims. We know one law firm here in Florida — I don't know it for a fact — I was told from a reliable source, they just hired a physician attorney and paid him $250,000 a year only to orchestrate plaintiffs' cases; to get their witnesses together, their pretrial testimony, their pretrial witnesses, and so forth, to play the game they play in the courtroom.



W. Harold Parham, D.H.A.

The Reciprocal Board has asked its Chairman, Dr. Astler, who has given a great deal of time, to cut back on his practice and attempt to contribute more time. He is very, very knowledgable on this subject having followed it eight years, (as all members of the Reciprocal Board are with what they go through with the heavy claims they are faced with), asked him to devote more of his time to the Reciprocal activities in the area of large claims beginning May 1, which was a few days ago. He has discussed this with his partners and I am happy to advise that he will be concentrating and spending some time and effort on the real large claims facing the Reciprocal. He will be coming into your communities when necessary, particularly in defense of claims over half a million dollars to be sure that he has your advice and counsel on the best people you can get in the community to help him with this effort. With the permission of the Speaker, I would like for you to ask the four members of the Board who are here to stand up and be recognized for their tremendous amount of work. You have Dr. Astler, your Chairman, who is here from Delray Beach, Dr. MaCris is here from St. Petersburg, Dr. Davenport from Miami, and Dr. Thames from Orlando. Dr. Hodes, the other Board member, who is in New York at a meeting, will not be in until Friday morning. But if any of you have any questions about the Reciprocal, they will be available during the Meeting. Please ask them and I will attempt to answer any question I can. I wish I could give you a rosier picture but if we can do a little more about some of the problems facing us, maybe next year we will have a better report.

I don't know whether you are familiar with it or not, but the war has really started with the plaintiff's Bar. They just sent a brochure to every news media in the state of Florida and just let me read you a few of the captions on this dastardly deed. "If the medical profession has its way, kids like Sean Mitchell won't have the medical care they need. Because of bad doctors negligence, Sean Mitchell will never grow up. Jeff Burlington will never walk again. Becky Carter will never be like other girls. Sherry Sanders will always have the mind of a child. . ." and it goes on and on with this diatribe. But what I want to talk to you about just one minute is the answer to this.

I have had calls from the Associated Press and everybody and their brother the past week, after they had their Press Conference blaming the Florida Medical Association and the profession in this state for bad doctors. I advised them as I would like to advise you, because of the Federal Trade Commission and the Justice Department restraint, the Florida Medical Association cannot do anything. The discipline of physicians and the responsibility for bad doctors in Florida lies with the state of Florida and the chief executive officer,

The Governor. The Board of Medical Examiners comes under his jurisdiction. And I asked the press that if we have a bunch of bad doctors in Florida, why don't you go talk to that sanctimonious guy that's running for President of the United States named Reuben Askew, who was the Governor of Florida for eight years. We went to him on numerous occasions and asked for money for the Board of Medical Examiners for investigators and prosecutors and he refused on every occasion to assist and as Governor of this state he didn't do anything about it. Secondly, I suggested they ask Gov. Graham. He is the chief executive officer. He is responsible for it in this state and that is where the responsibility lies, with the chief executive officer and the Board of Medical Examiners. Now, I think that is the best approach.

I am awfully tired of us being the whipping boy. Physicians in private practice have been the whipping boy of everything that goes wrong and I say this really got under my skin a bit and I think that that is the best approach to it if you are asked, "What about the bad doctors".

When the Board of Medical Examiners bring any charges against a physician that are legitmate, they get a lawyer and they never have their license revoked. They stay in practice. And I say why don't you go ask the Supreme Court who is responsible for the judicial system and why it stinks so rotten and why you can't do anything in the state of Florida. And so that is my approach to it, to put the monkey on someone else's back, where it belongs.

Thank you.

Dr. Perry announced corrections to the Handbook:

1. Page 20, middle of page, under Election of Officers, first column, "Vice Speaker" should read "Vice President".
2. Also on Page 20, under Election of Delegates to American Medical Association, "Delegate Seat Numbers 14, 16 and 17" should read "Delegate Seat Numbers 4, 6, and 7".
3. On page 43, under heading FMA Awards, Distinguished Layman Award, "The Board has selected the 1983 recipient of the Distinguished Layman Award. The appropriate citation, along with the criteria, will be included in the delegates notebook," and should read "The Board has selected two 1983 recipients of the Distinguished Layman Award. The appropriate citations, along with the criteria, will be included in the delegates notebook."
4. On page 44, under heading Nominations, Certificate of Appreciation, "The Board selected two physicians to be nominated to the House of Delegates as recipients of the 1983 Certificate of Appreciation. These nominations will be included in the delegates notebook for approval by the House of Delegates," should read "The Board selected the physician to be nominated to the House of Delegates as recipient of the 1983 Certificate of Appreciation. This nomination will be included in the delegates notebook for approval by the House of Delegates."



Joseph G. Matthews, M.D., Orlando (left), compares notes with Past President Jack A. MaCris, M.D., of St. Petersburg.

Dr. Perry announced the members of the Reference Committees, the assignment of AMA Delegates to the Reference Committees and the times that each Reference Committee would meet.

Reference Committee No. I
Health and Education

Calvin W. Martin, M.D., Chairman (AL) (DeSoto-Hardee-Glades)
John M. Canakaris, M.D. (A) (Flagler)
Kay K. Hanley, M.D. (B) (Pinellas)
Pedro A. Ramos, M.D. (C) (Dade)
Robert E. Boyett, M.D. (D) (Dade)
(Alternate — Robert Dawkins, M.D.)

Reference Committee No. II
Public Policy

H. Quillian Jones Jr., M.D., Chairman (B) (Lee)
James T. Cook III, M.D. (A) (Bay)
Luis R. Guerrero, M.D. (C) (Palm Beach)
Joseph Harris, M.D. (D) (Dade)
Stanley S. Goodman, M.D. (AL) (Broward)
(Alternate — Charles Price, M.D.)

Reference Committee No. III
Finance and Administration

David R. Arrowsmith, M.D., Chairman (A) (Okaloosa)
Virgil A. Ponzoli Jr., M.D. (B) (Collier)
V.A. Marks, M.D. (C) (Palm Beach)
Daniel L. Seckinger, M.D. (D) (Dade)
Donald L. Ames, M.D. (AL) (Indian River)
(Alternate — Cecil B. Wilson, M.D.)

Reference Committee No. IV
Legislation and Miscellaneous

Brian P. Gibbons, M.D., Chairman (C) (Brevard)
Robert H. Threlkel, M.D. (A) (Duval)
Kenneth C. Kiehl, M.D. (B) (Sarasota)
Arnold F. Schild, M.D. (D) (Dade)
Alvin E. Smith, M.D. (AL) (Volusia)
(Alternate — Ernest G. Sayfie, M.D.)
(Alternate — Thomas R. Busard, M.D.)



Leadership of Florida's medical schools met face to face with FMA Leadership at the Annual Deans Luncheon. Left to right: FMA President-Elect J. Lee Dockery, M.D., Gainesville; Henry M. Yonge, M.D., Chairman of the FMA Council on Scientific Activities, Pensacola; William B. Deal, M.D., Dean of the University of Florida College of Medicine, Gainesville; FMA President Robert E. Windom, M.D., Sarasota; and Bernard J. Fogel, M.D., Dean of the University of Miami School of Medicine.

Reference Committee No. V
Medical Economics

Charles A. Dunn, M.D., Chairman (D) (Dade)
Faris S. Monsour, M.D. (A) (Duval)
Robert H. Hux, M.D. (B) (Lake)
Paul A. Flaten, M.D. (C) (Broward)
Hector R. Mendez, M.D. (AL) (Orange)
(Alternate — Robert N. Serros, M.D.)
(Alternate — Richard A. Bagby, M.D.)

Dr. Perry announced that the assignments of reports and resolutions to Reference Committees were as indicated in the Handbook.

The Vice Speaker announced the assignment of Supplemental Reports and Resolutions which were received too late for inclusion in the Handbook and which had been inserted into the Delegates packets as indicated on the reports.

The Speaker called for any reports which had been received too late to be included on the agenda.

Dr. Daniel L. Seckinger of Dade County, on behalf of the sponsors of Resolutions 83-24 and 83-25, requested permission to withdraw Resolutions 83-24 and 83-25. Permission was granted by the Speaker.

Dr. Perry announced the dates and times of the Blue Shield Informational Meeting, the Baldwin Lecture, the Florida Physicians Association Annual Membership Meeting, the President's Reception and the FLAMPAC/Auxiliary Luncheon.

The House recessed at 5.40 p.m. to reconvene on Saturday, May 7, at 3:00 p.m.



Louis C. Murray, M.D. of Orlando (left), and Mr. Donald S. (Scotty) Fraser, Director of the FMA Legislation and Public Affairs, are discussing the next move in efforts to get FMA's tort reform proposals adopted by the Legislature.

President's Reception















The President's "Musical Follies" proved to be the social highlight of the Annual Meeting. Not only were members and guests treated to the listening and dancing pleasures of the Jack Golly Orchestra, but a number of FMA physicians displayed their musical, dancing, and comedy talents in what could only be described as "exceptional".

(1) F. Norman Vickers, M.D., of Pensacola, and his harmonica entertained at the President's Reception. (2) Louis Novak, M.D., demonstrated that he is an accomplished drummer. (3) Pianist J. Lee Dockery, M.D., plays a tune for friends. As FMA's new President, he will be calling the tunes. (4) Singer James F. Richards Jr., M.D., was among the headline entertainers who performed that evening. (5) The "Top Hats" were a hit act. The Journal's caption writer could not identify the midriffs. (6) The Doctors Perez of Sanford (Luis and Maria) demonstrated for other dancers some proper dance steps. (7) FMA President and Mrs. Robert E. (Lelia) Windom and sons Bob and Ross appear on stage.

Annual Meeting Highlights


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(1) FMA President Robert E. Windom, M.D., and FMA-Auxiliary President Mrs. Daniel B. (Gloria) Nunn. (2) JFMA Book Review Editor F. Norman Vickers, M.D., Pensacola; and Assistant Editors James K. Conn, M.D., Tallahassee, and Frank C. Coleman, M.D., Tampa. (3) James G. White, M.D., Ormond Beach, addresses the House of Delegates as the New Vice President of FMA. (4) FMA President-Elect and Mrs. J. Lee Dockery, M.D. (5) Mrs. Daniel B. (Gloria) Nunn chats with FMA Media Consultant Hank Drane. (6) Frank C. Coleman, M.D., Tampa, thanks the House of Delegates for the confidence it has expressed by electing him President-Elect of FMA. (7) Three of FMA's most ardent devotees of the sport of running enjoy a cool drink at the conclusion of the annual "Health Run for Fun". They are (left to right) James B. Perry, M.D., Fort Lauderdale; Rufus K. Broadaway, M.D., Miami, and C. Fenner McConnell, M.D., Pensacola, the winner. (8) U.S. Sen. Richard G. Lugar of Indiana (center) was the principal speaker for the Annual Auxiliary-FLAMPAC Luncheon. With the Speaker are FMA President Robert E. Windom, M.D. (left) and Tom Berglund, M.D. (right). (9) President Robert E. Windom, M.D., and President-Elect J. Lee Dockery, M.D., greet Mr. Robert D. Novak, this year's Baldwin Lecturer. (10) JFMA Editor Daniel B. Nunn, M.D. and wife Gloria. (11) C. Fenner McConnell, M.D., streaks toward the finish line to win his third "Health Run for Fun" in four years. (12) Mrs. Nunn; T. Byron Thames, M.D., Past President of FMA; JFMA Editor Daniel B. Nunn, M.D.; and Mrs. T. Byron (Pat) Thames, a Past President of the Auxiliary. (13) Louis C. Murray, M.D., of Orlando, Chairman of the FMA Council on Legislation (left), welcomes U.S. Sen. Richard G. Lugar. (14) (Left to right) J. Lee Dockery, M.D., President-Elect, Mr. Whalen M. Strobhar, Deputy Executive Vice President of the American Medical Association, and Robert E. Windom, M.D., FMA President.



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General Session

The General Session of the 109th Annual Meeting of the Florida Medical Association, Inc. was called to order at 11:00 a.m. on Friday, May 6, 1983, in the Regency Room North of the Diplomat Hotel, Hollywood, Florida.

Dr. Windom introduced the officers seated at the head table and then announced the winner of the 1983 A.H. Robins Award. Charles B. McIntosh, M.D., Jacksonville, was the recipient and was escorted to the podium by Drs. William J. Garoni and Charles P. Hayes, Jr., of Jacksonville. Mr. Gerald W. Kerlin represented the A.H. Robins Company.

A.H. Robins Company Award For Outstanding Community Service By A Physician

Charles B. McIntosh, M.D., a practicing pediatrician in Jacksonville, Florida, for the past 25 years has been selected by the Board of Governors of the Florida Medical Association, upon the nomination of the Duval County Medical Society, as the recipient of the 1983 A. H. Robins Company Award for Outstanding Community Service by a Physician.

A native of Jacksonville, Dr. McIntosh received a B.S. degree from Florida A&M University in 1948; an M.A. degree from New York University in 1950; and an M.D. degree from Meharry Medical College in 1955. After graduation from Meharry, he interned at Flushing Hospital, Flushing, New York, and completed a pediatric residency at Flushing and at Queens Hospital Center, Queens, Long Island, New York.

This year's recipient for many years has taken an active interest in the affairs of his community and his profession. He has served as a member of the Consolidated City of Jacksonville Building Code Adjustment Board, officer and director of the Jacksonville Urban League; and member of Planned Parenthood, North Florida Council of Boy Scouts of America (recipient of coveted Silver Beaver Award), Florida Society for the Prevention of Blindness, local and national branches of the National Association for the Advancement of Colored People, and the Florida Sickle Cell Foundation.

A former recipient of Florida A&M University's Distinguished Alumnus Award, Dr. McIntosh has served as medical consultant and a regular guest on a Jacksonville television program called "Black Family"; was awarded the Alpha Phi Alpha Award for outstanding service in civil and human rights; and has received the Brotherhood Award of the National Conference of Christians and Jews.

Professionally, Dr. McIntosh has served as Chief of Staff and Chief of Pediatrics at Jacksonville's Methodist Hospital and is an attending pediatrician at University Hospital of Jacksonville, St. Luke's Hospital and Jacksonville Wolfson Children's Hospital. He has been consulting pediatrician for United Cerebral Palsy of Jacksonville; medical director of the Headstart Child Development Center, Greater Jacksonville Economic Opportunity; and a member of the Duval County Hospital Authority and the University Medical Center Board.

Dr. McIntosh has been an active member of the Duval County Medical Society, Florida Medical Association, Florida State Medical, Dental and Pharmaceutical Association (former president); Florida Pediatric Society; the American Medical Association and the National Medical Association. He has been a Duval County delegate to FMA for 11 years.

Dr. McIntosh is a Past President of both the Duval County Medical Society and the related Academy of Medicine of Jacksonville.

In the 1970s, Dr. McIntosh participated in state government as a member of the Florida State Board of Medical Examiners by appointment of former Gov. Rueben O'D. Askew. He was President of the Board in 1979.

Dr. McIntosh is a member of the Mt. Zion A.M.E. Church in Jacksonville. He and Mrs. McIntosh, the former Anne Griffin of Pensacola have a daughter, Donna.



Each year the A. H. Robins Company sponsors an award honoring an FMA member for "Outstanding Community Service by a Physician." This year's recipient was Charles B. McIntosh, M.D., of Jacksonville (center), a Past President of the Duval County Medical Society. Others in the picture are (left to right): Charles P. Hayes, M.D., Jacksonville; William J. Garoni, M.D., Jacksonville; Robert E. Windom, M.D., FMA President; and Mr. Gerald W. Kerlin of the A.H. Robins Company.

Dr. Windom proceeded to announce the first of two recipients for the Distinguished Layman Award. Mr. Harold Jaffer of Miami was announced as the winner and was escorted by Drs. Daniel L. Seckinger and Richard J. Feinstein of Dade County.



Mr. Harold Jaffer of Miami (far right) receives FMA's Distinguished Layman Award from FMA President Robert E. Windom, M.D., while Richard J. Feinstein, M.D. (left), and Daniel Seckinger, M.D., both of Miami look on approvingly.

Distinguished Layman Award
Mr. Harold Jaffer

Whereas, Harold Jaffer of Miami, Florida, has served on the Board of Directors of one of the nation's 10 largest blood centers for 28 years; and

Whereas, He was Chairman of the Board of this blood center for 12 years; and

Whereas, His accomplishments touch the lives of more than two million people who demand a safe and adequate blood supply in their community; and

Whereas, This distinguished individual has served as a volunteer since the early 1950's, devoting his time and talents to the cause of blood services in a geographical region which included the most populous area of Florida; and

Whereas, His efforts to reestablish an all-volunteer blood supply in the mid-1960's when the need for blood surpassed voluntary donations and medical evidence mounted pointing to the dangers of paid blood as carrying a higher risk of transmitting hepatitis were successful; and

Whereas, Under his leadership, the board of the blood bank hired new professional managers to run what was known by the late 1970's as the John Elliott Community Blood Center; and

Whereas, As a result of his efforts for an all-volunteer blood supply, in January 1982 paid blood was eliminated and 100 percent of the blood supply today — averaging 130,000 pints a year — is provided by volunteer donors; and

Whereas, Harold Jaffer was instrumental in the movement to construct a new building for the growing blood services program and in 1971, the first such facility to be built on land wholly owned by the blood bank was completed and is still in use today; and

Whereas, Many times through his tenure of leadership, the blood bank came under heavy public scrutiny and media criticism, and he skillfully directed public attention to the need to reestablish an all-volunteer blood supply and gained the support of the media for the South Florida Blood Service, as it was renamed a year ago; and

Whereas, This respected man remains an active board member of the blood services today; therefore be it

RESOLVED, That upon the unanimous vote of the Board of Governors, the Florida Medical Association at its 109th Annual Meeting in Hollywood, Florida, May 4-8, 1983, presents to Harold Jaffer its Distinguished Layman Award.

Dr. Windom announced the recipient of the second Distinguished Layman Award. Mr. John F. Wymer, Jr., of Palm Beach was escorted by Drs. Richard C. Cavanagh and James F. Smith both of Palm Beach County.

Distinguished Layman Award
Mr. John F. Wymer, Jr.

Whereas, John F. Wymer Jr., L.F.A.C.H.A., of West Palm Beach served as Administrator of Good Samaritan Hospital of West Palm Beach for 34 years; and

Whereas, He is presently serving Good Samaritan as Vice President for Development; and

Whereas, Before moving to Florida he served in the United States Army's Medical Department, Organized Reserve — Medical Administrative Corp. and in active duty the Medical Service Corp; and

Whereas, John F. Wymer Jr., is a Life Fellow of the American College of Hospital Administrators; and

Whereas, This distinguished individual is a personal member of the Florida Hospital Association and served as a Trustee and member of the Executive Committee from 1949 to 1952 and as its President from 1953 to 1954 and as a Florida delegate to the American House of Delegates from 1954 to 1955; and

Whereas, He received the highest honor of the Florida Hospital Industry, the Award of Merit in 1972 from the Florida Hospital Association Research and Education Foundation; and

Whereas, He served as President of the Southeastern Hospital Conference of 11 states from 1963 to 1964 and was a member of its Board of Directors for eight years; and

Whereas, He served on the FMA's Committee on the Cost of Medical Care for two years; and

Whereas, John F. Wymer Jr., served as a member of the Board of Directors of Blue Cross of Florida for almost 29 years, 25 years as a member of the Executive Committee and 22 years as Vice President and Vice Chairman of the Board and has been an honorary member of the Board since 1978; and

Whereas, He was a member of the original Governors Advisory Council to the State of Florida for the licensure of hospitals, 1957 through 1972, having been appointed by three governors; and

Whereas, He was President and Founder of the Palm Beach County Society of Hospital Administrators from 1967 until his retirement in 1981; and

Whereas, He was one of the founders of the Palm Beach County Areawide Health Planning Council and was its President in 1973 and was a member of its Board of Directors from 1967 to 1974; and

Whereas, He was elected the first and only non-physician Honorary Member of the Palm Beach County Medical Society in 1973; and

Whereas, He is an honorary member of the Fraternal Order of Police, a member of the Advisory Board of the Salvation Army, a member of the Visiting Nurses Association Board of Directors for eight years, and served on the Executive Committee of the Crippled Childrens Society several years and as a board member for 19 years; and

Whereas, He was elected a member of the Lambs Club in 1964, a club for men who have given outstanding service in the field of hospital administration; and

Whereas, He was elected to the Board of Directors, Local Chapter, of the Arthritis Foundation in 1979 and is still serving; and

Whereas, John F. Wymer Jr., continues to serve the medical profession and his community with his talent, energy and time; therefore be it

RESOLVED, That upon unanimous vote of the Board of Governors, the Florida Medical Association at its 109th Annual Meeting in Hollywood, Florida, May 4-8, 1983, presents to John F. Wymer Jr., its Distinguished Layman Award.



Mr. John F. Wymer, Jr. of Palm Beach receives the second Distinguished Layman Award from FMA President Robert E. Windom, M.D., while Richard C. Cavanagh, M.D. and James F. Smith, M.D. both of Palm Beach County look on.

Dr. Windom presented the Annual Awards for Excellence in Medical Journalism conducted by the FMA for the news media and independent writers and producers. Previously, all entries were judged by a single panel of judges. However, this year the judging was split, with one panel evaluating the magazine and newspaper entries and the other judging the radio and television entries. The radio and television categories were judged by our Immediate Past President, Dr. Sanford A. Mullen, Mr. William Dunn, Managing Editor of the *Orlando Sentinel*, and Mr. Edward D. Hagan, Director of the FMA Department of Communications. Judging the newspaper and magazine articles were Dr. James W. Walker, President of PIMCO, Mr. Stephen Strang of Orlando, Editor and Publisher of *Charisma Magazine*, and Dr. Daniel B. Nunn, Editor *The Journal of the Florida Medical Association*.

Dr. Windom observed that "...We are sometimes critical of the media, but in the main I think that our Florida newspapers, magazines, radio and television stations do an excellent job in their medical reporting. It is the intent of our awards program to encourage and recognize outstanding medical reporting."

Due to time restraints, only first place winners were invited to the General Session. Second place and honorable mention awards were sent to county medical societies for local ceremonies at a later date. First Place in each of the six categories carries with it a trophy and a check for $500. The winners are as follows:



Stanley S. Goodman, M.D., and Mr. William G. Stafford, President and Executive Vice President, respectively, of the Broward County Medical Association, accepted a Medical Speakers Award on behalf of BCMA from President Robert E. Windom, M.D.



Mr. John F. Lovejoy, Jr. and William J. Garoni, M.D., both of Duval County Medical Society, accepted a Medical Speakers Award on behalf of DCMS from President Robert E. Windom, M.D.

In the radio category, Mr. Tom Blair of Radio Stations WDBO AM and FM in Orlando won for the 10-part series "It's Your Body".

The top television entry was a five-part series on genital herpes by Mr. Ken Amaro of WTLV, Channel 12 in Jacksonville.

The third award was the President's Plaque for Community Service. This award is presented upon the recommendation of a county medical society after review by the FMA. The President's Award this year recognizes an excellent television production entitled "Never Too Thin", about anorexia nervosa. It was produced and broadcast by WCKT, Channel 7 in Miami. The Award is made to a three-member team which produced it — Anchorperson Sally Fitz, Producer Valerie Wadas-Willingham and Cameraman Layne Batt.

Three awards are presented in the category of print-media. The first award goes to a three-part series on health care costs in *U-T-D Today*, a Dade County publication which stands for "United Teachers of Dade". The winning author is Annette Katz.

In the newspaper category of over 50,000 circulation, Linda Jones and Ann Frank won first place for a dramatic story about a baby named Daniel who was born with a bullet in his brain. The result of a family disturbance, Daniel's injury was not fatal due to the miracle of modern medicine. The story was carried in both the *Ft. Lauderdale News* and *Sun-Sentinel*.

In the under 50,000 circulation category, Reporter Jennifer Milelli of the Fort Pierce *News-Tribune* won first place. As a result of a grave illness in her family, Ms. Milelli came into contact with the hospice program in her area which inspired her three-part series.

Medical Speakers Award

In recent years physicians and county medical societies have become increasingly active in communications, particularly in radio and television. In order to encourage this activity and to recognize the best efforts in this field, the FMA has established an annual awards program for medical speakers.

This year, there were several outstanding entries and the judges have selected two county medical societies for First Place awards.

Each award consists of a plaque and a check for $100, to be used by the county medical society to enrich its public speakers program.

One First Place Award goes to the Broward County Medical Association which sponsors and produces a regular half-hour television program that is available to more than 100,000 homes on Selkirk Television and Hollywood Cablevision. Each program is emceed by Mr. William Stafford, Executive Director of the Broward County Medical Association and features two physician guests.

The next First Place Award goes to the Duval County Medical Society. Each week Duval conducts a one-hour radio listener call-in program over a commercial station in Jacksonville. During 1982, 40 programs were broadcast and they featured 16 physician guests.

Malpractice Prevention Award

A very timely award we give each year is called the FMA Malpractice Prevention Award. Any physician member of the Florida Physicians' Insurance Reciprocal is eligible as are teams of physicians, hospital administrators, risk managers, clinic managers or other individuals who during the year presented timely

programs, produced a publication or offered help in the defense of a physician under a possible malpractice threat.

Nominations are submitted by county medical societies, and the winner is determined by the FMA Board of Governors.

This year's winner was nominated by the Duval County Medical Society and his name is Dr. John C. Kruse of Jacksonville. Dr. Kruse, an anesthesiologist, has absorbed a great deal of information about medical malpractice, and his service to the profession in this area of concern has been significant. He is being honored today particularly for an article he wrote called "Professional Liability in the Practice of Anesthesia". This paper was published in the August 1982 issue of *The Florida Society of Anesthesiologists Newsletter.*

The award consists of a handsome plaque and a check for $100 from the Florida Physicians' Insurance Reciprocal.



John C. Kruse, M.D., of Jacksonville, receives the annual Medical Malpractice Prevention Award from FMA President Robert E. Windom, M.D.

Sandoz Award

The Journal of the Florida Medical Association, Inc., was awarded first place in the State Medical Journal category of the Eighth Annual Sandoz Medical Journalism Competition. The criteria for the award were primarily good design and writing. Dr. Daniel B. Nunn, Editor, accepted the $500 check and certificate from Mr. Howie Workowski, Sandoz Pharmaceutical Company.



The Journal of the Florida Medical Association was the winner of the 1983 Medical Journalism Awards Contest sponsored by Sandoz Pharmaceuticals. JFMA Editor Daniel B. Nunn, M.D. (center) receives the citation from Mr. Howie Workowski of Sandoz (left) while FMA President Robert E. Windom, M.D., looks on.

Sixth Annual JFMA Awards Contest for County Medical Society Bulletins

After receiving the Sandoz Award, Dr. Nunn presented the awards for the Sixth Annual JFMA Contest for County Medical Society Bulletins.

Category I: General Excellence

First Place: *The Stethoscope* (Bulletin of the Volusia County Medical Society) R.G. Lacsamana, M.D., Editor.
Special Citation: *Miami Medicine* (Bulletin of the Dade County Medical Association) Richard J. Feinstein, M.D., Editor.

Category II: Most Improved Bulletin
First Place: *The Bulletin of the Hillsborough County Medical Society*, John E. Perchalski, M.D., Editor.

Category III: Best Editorial
First Place: *The Stethoscope* (Bulletin of the Volusia County Medical Society)
Winning Entry: "The Changing Medical Image" (March 1982), R.G. Lacsamana, M.D., Editor.
Special Citation: *Miami Medicine* (Bulletin of the Dade County Medical Association)
Cited Entry: "Free to Choose" (October 1982) Richard J. Feinstein, M.D., Editor.

Category IV: Best Regular Feature
First Place: *The Escambia County Medical Society Bulletin*, "Chit and Chatter", F. Norman Vickers, M.D., Editor.

Category V: Special Recognition
First Place: *The Lee County Medical Society Bulletin*, for the series, "FMA, Part I, II, and III," March through May, 1982.

Dr. Nunn introduced the winner of the Editor's Award which is presented annually to the best entry in the FMA Auxiliary Art Show as judged by a panel of consulting editors. This year's winning entry was a watercolor "Brahman Cow & Calf" painted by Mrs. Janet W. Heaton of West Palm Beach. The winning entry traditionally appears on the cover of the Proceedings Issue.

Dr. Windom thanked the Editor and then proceeded to announce the winners of the 1983 Scientific Exhibit Awards

1983 Scientific Exhibit Awards

First Place: "Alternatives to the Saphenous Vein in Coronary Bypass Surgery" David L. Galbut, M.D., Miami.

Second Place: "Use of Computer in Nutritional Assessment" Roy E. Vartabedian, M.D., D.H.Sc., Orlando.

Third Place: "Adolescent Drug Abuse: Early Intervention is Effective Prevention" Charles E. Koch, M.D, Venice.

Honorable Mention: "Orange Playhouse, A Therapeutic Group Program for Sexually Abused Preschool Children" Carol C. Haase, Orlando.

"Anatomic Approaches to Ear Surgery" Jay B. Farrior, M.D., Tampa.

"To Your Health" Mr. Ernest R. Currie, Executive Vice President, Duval County Medical Society, Jacksonville.











Five County Bulletins Honored

Five county medical societies received plaques in the Sixth Annual Journal of the Florida Medical Association Awards Contest for County Medical Society Bulletins. FMA President Robert E. Windom, M.D., and JFMA Editor Daniel B. Nunn, M.D., presented the awards at the General Session on Friday. (1) R.G. Lacsamana, M.D., Editor of The Stethoscope (Volusia County) accepts the first place General Excellence Award, and first place for the Best Editorial. (2) Robert E. McCammon, M.D., Hillsborough CMA President accepts the Most Improved Bulletin Award. (3) Richard J. Feinstein, M.D., Editor of Miami Medicine (Dade County) accepts a Special Citation for General Excellence, and also a Special Citation for Best Editorial. (4) F. Lee Howington, M.D., Lee County Medical Society accepts first place in the Special Recognition Category. (5) F. Norman Vickers, M.D., Editor Escambia County Medical Society Bulletin accepts first place for Best Regular Feature.



Whalen M. Strobhar, Deputy Executive Vice President of the American Medical Association, received an FMA Certificate of Grateful Recognition in recognition of his 25 years of service to organized medicine.

Dr. Windom announced the awarding of a Certificate of Grateful Recognition to Mr. Whalen M. Strobhar, AMA Deputy Executive Vice President for Public, Scientific and Health Service Policy, for his many important contributions to the medical profession. Dr. Windom requested that Mr. Strobhar be escorted to the podium by Drs. Edward R. Annis and Rufus K. Broadaway.

Certificate of Grateful Recognition

Whereas, Whalen M. Strobhar, a native Floridian and one of the highest ranking laymen in the hierarchy of the American Medical Association, in the year 1983 observes his 25th anniversary of faithful and dedicated service to organized medicine and the nation's physicians; and

Whereas, This fourth generation Floridian was born in the town of Palmetto in Manatee County in 1932, attended Manatee High School in Bradenton, and graduated from the University of Florida in 1957 with a degree in industrial management; and

Whereas, He served his country as a Navy medical corpsman during the Korean conflict; and

Whereas, In 1958, Mr. Strobhar joined Blue Shield of Florida, providing staff service to the Florida Medical Association House of Delegates in its role as Blue Shield Governing Body, and working with the old FMA Committee of 17; and

Whereas, Seven years later, Mr. Strobhar joined the American Medical Association, working first as a field representative in the Southeastern states, including Florida; and

Whereas, His Outstanding record of performance earned for him frequent promotions in the administrative structure of AMA to his present position as Deputy Executive Vice President for Public, Scientific and Health Service Policy; and

Whereas, During his time with AMA, Mr. Strobhar served as Director of the Public Affairs Division, Assistant Executive Vice President, and Senior Vice President for Administration; and

Whereas, In his various staff roles, Mr. Strobhar has applied his considerable expertise and abilities to virtually every program area in which AMA is involved, including legislation, publishing, professional liability and political action; and

Whereas, Medical Society staff members throughout the country paid Mr. Strobhar the supreme compliment by electing him President of the American Association of Medical Society Executives; and

Whereas, "Stro", as he is affectionately known to his legion of friends, has always reserved a special place in his heart and mind for Florida, answering quickly and informatively all requests for assistance from FMA leadership, members and staff; and

Whereas, Mr. Strobhar's many important contributions have made organized medicine stronger, more effective and better able to meet all challenges; now therefore be it

RESOLVED, That this Certificate of Grateful Recognition be awarded to Whalen M. Strobhar during this very significant year of his lifetime with the sincere thanks for his many and tireless contributions to the medical profession and best wishes of the officers, members and staff of the Florida Medical Association that he enjoy many more years of productive service to medicine.

Dr. Windom invited Dr. Eugene G. Peek, Jr., President of the Florida Medical Foundation, and Mrs. Daniel B. Nunn, President of the FMA Auxiliary, to come to the podium for the presentation of grants from the AMA-ERF to Medical School Deans.

Checks were presented to Dr. William B. Deal, Dean, University of Florida College of Medicine; Dr. Bernard J. Fogel, Dean, University of Miami College of Medicine; and Dr. Frank J. Cozzetto, Associate Dean, University of South Florida College of Medicine representing Dr. Andor Szentivanyi, Dean of the College.



AMA-ERF checks were presented to representatives of the States three medical schools by Eugene G. Peek Jr., M.D., President of The Florida Medical Foundation (right). Left to right: William B. Deal, M.D., Dean of the University of Florida College of Medicine; Frank J. Cozzetto, M.D., Associate Dean, University of South Florida College of Medicine; Jonathan J. Braunstein, M.D., Associate Dean of Medical Education, University of Miami College of Medicine; Mrs. Walter G. (Jody) Jarrell, AMA-ERF Chairman for the Auxiliary; Auxiliary President Mrs. Daniel B. (Gloria) Nunn; and Dr. Peek.

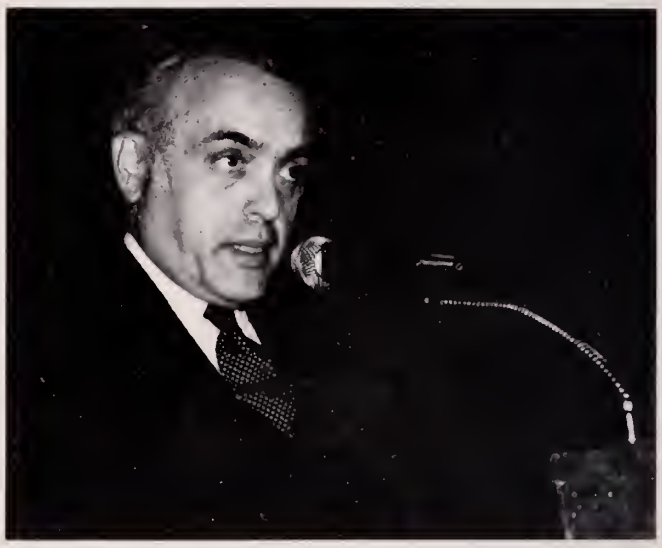
After the presentations, Mrs. Nunn made a special presentation to Dr. Peek of a check for $5,000 for the Impaired Physicians Program of the Florida Medical Founation.

Dr. Windom introduced the 1983 Abel S. Baldwin Lecturer, Mr. Robert D. Novak, a nationally known author, newspaper columnist, and television commentator from Washington, D.C. Mr. Novak began his remarks by observing that although a year ago the stock market was on ground zero and President Reagan was dropping in the polls, all this is now reversed and the President appears stronger than ever with a sure campaign around the corner.

According to Mr. Novak, President Reagan is the first President in modern American to come into office with an agenda. This program has essentially two parts. Part number one is to remove the economic wedge, as economists call it, of taxation and regulation which has been choking and suffocating American economy increasingly the last twenty years. The second part is to restore the delapidated state of American defense and offense to take a position of strength in negotiating with our adversaries and in guiding our allies.

Political campaigns have become increasingly ideological and there was a sense in 1980 that the American people were being given a clear choice on how they wanted to be governed on basics. Doctors who don't like to lobby or who don't like politics are being drawn into the political process because so much is at stake.

Mr. Novak went on to describe the struggle between "populist" and "elitist" thought in a detailed examination. The struggle between these two ideologies will determine what kind of country we are going to be in the third century of the Republic.



Syndicated columnist Robert D. Novak of Washington, D.C., presented the annual Baldwin Lecture.



FMA's Past Presidents always look forward to their annual breakfast and picture-taking session. Seated (left to right): H. Phillip Hampton, M.D., Tampa (1965); Samuel M. Day, M.D., Jacksonville (1964); Jere W. Annis, M.D., Lakeland (1958); Henry J. Babers, M.D., Gainesville (1969); and George S. Palmer, M.D., Tallahassee (1966). Standing: Richard S. Hodes, M.D., Tampa (1979); Joseph C. Von Thron, M.D., Cocoa Beach (1973); T. Byron Thames, M.D., Orlando (1980); Vernon B. Astler, M.D., Boynton Beach (1975); Jack A. MaCris, M.D., St. Petersburg (1976); Sanford A. Mullen, M.D., Jacksonville (1981); O. William Davenport, M.D., Miami (1978); and Louis C. Murray, M.D., Orlando (1977).

Second House of Delegates

The Second Meeting of the House of Delegates convened at 3:15 p.m., Saturday, May 7, 1983, in the Regency Room North of the Diplomat Hotel, Hollywood, Florida with Dr. James B. Perry, Speaker of the House, presiding.

Dr. Fred S. Carter, Chairman of the Credentials Committee, reported that 239 delegates were present with 37 component county societies represented, constituting a quorum, and moved that the delegates be seated. The motion carried.

Delegates

ALACHUA — O. Frank Agee, M.D.; Mark V. Barrow, M.D.; William B. Deal, M.D.; Mr. James Dolan; Charles P. Gibbs, M.D.; William T. Hawkins, M.D.; Douglas O. Jenkins, M.D.; (Absent — Thomas D. Bartley, M.D.)

BAY — William G. Bruce, M.D.; James T. Cook III, M.D.; (Absent — B. Philip Cotton, M.D.)

BREVARD — Hani M. Agrama, M.D.; Raymond A. Armstrong, M.D.; Walter A. Cerrato, M.D.; Brian P. Gibbons, M.D.; Francis S. Pooser, M.D.; Paul J. Popovich, M.D.; Joseph Von Thron, M.D.

BROWARD — Charles H. Bechert, III, M.D.; Herbert E. Brizel, M.D.; Bruce B. Burgess, M.D.; Walter Campbell, M.D.; Andre S. Capi, M.D.; David A. d'Alessandro, M.D.; Arthur L. Eberly, M.D.; Paul A. Falten, M.D.; Richard S. Green, M.D.; Stanley S. Goodman, M.D.; Theodore W. Hahn, M.D.; John M. Harper, M.D.; William C. Hartley, M.D.; Wilbur F. Helmus, M.D.; Thomas J. Lescher, M.D.; Alexander E. Molchan, M.D.; Jerry D. Moore, M.D.; Ernest G. Sayfie, M.D.; John F. Shaw, M.D.; Marvin L. Stein, M.D.; Anthony J. Vento, M.D.; Juan S.A. Wester, M.D.; (Absent — James A. Jordan, M.D.; Ray E. Murphy, M.D. Joseph M. Sachs, M.D.; Richard D. Schultz, M.D.; Herbert M. Todd, M.D.; Peter A. Tomasello, M.D.)

CAPITAL — Robert P. Johnson, M.D.; Nelson H. Kraeft, M.D.; George N. Lewis, M.D.; Jack W. MacDonald, M.D.; Robert N. Webster, M.D.

CHARLOTTE — Thomas R. Civitella, M.D.; Joseph R. Goggin, M.D.; Jaime Torner, M.D.

CITRUS-HERNANDO — Wilburn R. Jenkins, M.D.; Clinton J. McGrew, M.D.

CLAY — (Absent — Clarence M. Harris, M.D.; William S. Bazley, M.D.)

COLLIER — Charles S. Eytel, M.D.; Virgil A. Ponzoli Jr., M.D.; Joseph F. Sullivan, M.D.

COLUMBIA — (ABSENT)

DADE — Duane E. Banks, M.D.; Virgilio I. Beato, M.D.; Jerome Benson, M.D.; Valentine Bloch, M.D.; Robert E. Boyett, M.D.; Rufus K. Broadaway, M.D.; John O. Brown, M.D.; Harlan S. Chiron, M.D.; Richard C. Clay, M.D.; Vincent P. Corso, M.D.; DeWitt C. Daughtry, M.D.; O. William Davenport, M.D.; Joseph H. Davis, M.D.; Charles A. Dunn, M.D.; Richard J. Feinstein, M.D.; Miguel Figueroa, M.D.; N. Ralph Frankel, M.D.; M. Fleix Freshwater, M.D.; Richard L. Glatzer, M.D.; Edward E. Goldman, M.D.; Ms. Ana I. Gonzalez; Alan S. Graubert, M.D.; Joseph Harris, M.D.; James J. Hutson, M.D.; Donald E. Johnson, M.D.; Sean M. Kaufman, M.D.; Norman M. Kenyon, M.D.; Jesse G. Keshin, M.D.; Maurice H. Laszlo, M.D.; Warren Lindau, M.D.; Carlos G. Llanes, M.D.; Simon E. Markovich, M.D.; Morton L. Miller, M.D.; Miguel A. Mora, M.D.; Dolores A. Morgan, M.D.; Sheldon D. Munach, M.D.; Joseph T. Ostroski, M.D.; Pedro A. Ramos, M.D.; Harry T. Remmer, M.D.; William I. Roth, M.D.; Arnold F. Schild, M.D.; Daniel L. Seckinger, M.D.; Everett Shocket, M.D.; Margaret C. S. Skinner, M.D.; Douglas Slavin, M.D.; John C. Turner, M.D.; Osvaldo D. Valdes, M.D.; Harold H. Weiner, M.D.; Steven M. Weissberg, M.D.; Leo Whitman, M.D.; Edmund K. Zahn, M.D.; Sheldon Zane, M.D.; (Absent — Victor O. Calderin, M.D.; Julian H. Groff, M.D.; Charles A. Monnin Jr., M.D.; Oscar Sandoval, M.D.; Marvin B. Slotkin, M.D.; Bruce W. Weissman, M.D.)

DESOTO-HARDEE-GLADES — Calvin W. Martin, M.D.

DUVAL — Harvey E. Bernhardt, M.D.; Wilbert L. Dawkins, M.D.; Richard C. Dever, M.D.; William J. Garoni Jr., M.D.; Walter A. Harmon, M.D.; Charles P. Hayes Jr., M.D.; Howard P. Hogshead, M.D.; Charles W. Lewis, M.D.; John F. Lovejoy Jr., M.D.; Kevin M. McAuliffe, M.D.; Charles B. McIntosh, M.D.; William Z. McLear III, M.D.; Faris S. Monsour, M.D.; Daniel B. Nunn, M.D.; Guy T. Selander, M.D.; Robert H. Threlkel, M.D.; George S. Trotter, M.D.; James W. Walker, M.D.; William D. Walklett, M.D. (Absent — Gaston J. Acosta-Rua, M.D.)

ESCAMBIA — Richard H. Ciordia, M.D.; Charles J. Kahn, M.D.; Charles F. McConnell, M.D.; Michael R. Redmond, M.D.; F. Norman Vickers, M.D.; Robert K. Wilson Jr., M.D.

FLAGLER — John M. Canakaris, M.D.

FRANKLIN-GULF — Joseph P. Hendrix, M.D.

HIGHLANDS — Carlos J. Gonzalez, M.D.; Luis M. Pena, M.D.

HILLSBOROUGH — Richard A. Bagby, M.D.; William T. Branch, M.D.; Francis C. Coleman, M.D.; Richard G. Connar, M.D.; Emilio D. Echevarria, M.D.; Thomas H. Greiwe, M.D.; Mr. Alex Gross; Glenn S. Hooper, M.D.; Robert G. Isbell, M.D.; Victor H. Knight Jr., M.D.; Thomas E. McKell, M.D.; Robert E. McCammon, M.D.; J. Robert Qualey, M.D.; Gerald L. Stoker, M.D.; William W. Trice, M.D.; Ferdinando Vizzi, M.D.; James A. Winslow Jr., M.D.

INDIAN-RIVER — Paul A. Graham, M.D.; K. Gordon Kelso, M.D.; (Absent — Donald L. Ames, M.D.)

LAKE — Robert H. Hux, M.D.; (Absent — Joseph Comfort, M.D.; Joseph E. Holland, M.D.)

LEE — Cecil C. Beehler, M.D.; Larry P. Garrett, M.D.; Francis L. Howington, M.D.; H. Quillian Jones Jr., M.D.; Joseph P. O'Bryan, M.D.; Stephen R. Zellner, M.D.

MADISON — (Absent — Melvin H. Thomas, M.D.)

MANATEE — Thomas R. Busard, M.D.; David Fulghum, M.D.; Julian Giraldo, M.D. James T. Rogers Jr., M.D.

MARION — Claude B. Henderson, M.D.; James L. McLaughlin, M.D.; Samuel L. Renfroe, M.D.

MARTIN — Fred S. Carter, M.D.; Andrew F. Greene, M.D.

MONROE — Robert D. Carraway, M.D.; Ronald H. Chase, M.D.

NASSAU — Cecil B. Brewton, M.D.

OKALOOSA — David R. Arrowsmith, M.D.; Samuel M. Atkinson Jr., M.D.

ORANGE — Edward Ackerman, M.D.; Clifford D. Bidwell, M.D.; Clarence H. Brown III, M.D.; Manuel J. Coto, M.D.; Angelo Massaro, M.D.; Joseph G. Matthews, M.D.; Hector R. Mendez, M.D.; Louis C. Murray, M.D.; Calvin R. Peters,

M.D.; Charles D. Price, M.D.; James F. Richards Jr., M.D.; Robert N Serros, M.D.; Edward W. Stoner, M.D.; Robert B. Trumbo, M.D.; Cecil B. Wilson, M.D.; (Absent — William E. Hoffmeister, M.D.)

OSCEOLA — Gilberto Perez, M.D.

PALM BEACH — Vernon B. Astler, M.D.; J. A. Baker, M.D.; Elizabeth J. Barice, M.D.; Richard C. Cavanagh, M.D.; John D. Corbitt Jr., M.D.; Ralph R. Eastridge, M.D.; Lee A. Fischer, M.D.; Luis R. Guerrero, M.D.; James M. Johnson, M.D., V. A. Marks, M.D.; William J. Romanos Jr., M.D.; James F. Smith, M.D.; Dick L. Van Eldik, M.D.; (Absent — James R. Forlaw, M.D.; Stephen N. Martyak, M.D.; Roger D. Petersen, M.D.)

PANHANDLE — Herbert E. Brooks, M.D.; (Absent — James T. Cook Jr., M.D.)

PASCO — Robert D. May, M.D.; (Absent — Herman R. Reno, M.D.; Randall D. Sells, M.D.)

PINELLAS — Robert L. Dawson, M.D.; Charles K. Donegan, M.D.; John Flint, M.D.; Jose Galvez, M.D.; John M. Hamilton, M.D.; Kay K. Hanley, M.D.; Harold L. Ishler Jr., M.D.; Morris J. LeVine, M.D.; Jack A. MaCris, M.D.; Donald G. Nikolaus, M.D.; Rex Orr, M.D.; David T. Overbey, M.D.; Bruce P. Smith, M.D.; Walter H. Winchester, M.D.; (Absent — William W. Atkinson, M.D.; Thomas M. Daniel, M.D.; David Jones, M.D.)

POLK — Thomas M. Caswall, M.D.; Ray Barnes, M.D.; John W. Glotfelty, M.D.; Henry M. Haire, M.D.; Thomas E. McMicken, M.D.; John C. Moore, M.D.; Robert B. Peddy, M.D.; (Absent — Ronald W. Case, M.D.)

PUTNAM — Roy E. Campbell, M.D.

ST. LUCIE-OKEECHOBEE — Charles R. Cambron, M.D.; William H. Meyer Jr., M.D.; (Absent — David L. Fromang, M.D.)

SANTA ROSA — D. Bruce Young, M.D.

SARASOTA — Samuel E. Kaplan, M.D.; Kenneth C. Kiehl, M.D.; Martin F. Mihm, M.D.; Douglas R. Murphy, M.D.; Franklin H. Pfeiffenberger, M.D.; Richard C. Rehmeyer, M.D.; Karl R. Rolls, M.D.; David L. Thomas, M.D.

SEMINOLE — Luis M. Perez, M.D.; Orlando Garcia-Piedra, M.D.

SUWANNE-HAMILTON-LAFAYETTE — (Absent — Alex Kish, M.D.)

TAYLOR — (Absent — John H. Parker, M.D.)

VOLUSIA — Grandy B. Barnard, M.D.; Martin S. Feigenbaum, M.D.; Robert W. Lankford, M.D.; Alvin E. Smith, M.D.; Richard W. Snodgrass, M.D.

WALTON — James D. Lawlor, M.D.

WASHINGTON — (Absent — Sheikh M. Ilyas, M.D.)

SPEAKER OF THE HOUSE — James B. Perry, M.D.

VICE SPEAKER — Franklin B. McKechnie, M.D.

Dr. Perry requested that Dr. Windom announce the winners of the FMA Delegates Golf Tournament. First Place Low Gross with a 71 was Scotty Fraser, Second Low Gross at 78 was Dr. Tom Civitella, Third Low Gross at 79 was Dr. Seth Lowell. In the Low Net Division, Bill Stafford with a 64 for First Place, Dr. Jerry Moore was Second Low Net at 67 and Dr. Bill Bacon was Third Low Net at 70.

Dr. Windom also announced the top three winners of the 1983 Health Run. In First Place with a running time of 15:42 was Dr. C. Fenner McConnell, Second Place with a time of 17:10 was Dr. Joseph Kudyba and in Third Place with a time of 17:39 was Dr. Victor Doig.

Dr. Windom then recognized those individuals who attended all the exhibits. They were Mrs. Sue Bertolette, Dr. Robert H. Hux and Dr. Edward N. Smolar.

Dr. Windom then introduced the following individuals as honored guests: Dr. William Y. Rial of Swarthmore, Pennsylvania, AMA President; Dr. Joseph F. Boyle of North Hollywood, California, Chairman of the AMA Board of Trustees; Dr. Max Cole of Dallas, Texas, AMA Trustee; and Dr. Tom Berglund of Michigan, Secretary of AMPAC..

Dr. Rial was then asked to address the House of Delegates by Dr. Windom.

Dr. William Y. Rial, President, AMA

Thank you ladies and gentlemen for that very warm welcome. Mr. Speaker, Mr. President, presidents past, presidents future, ladies and gentlemen, friends, guests, students. It is a pleasure for me to be the ambassador of each of you to other doctors, to other specialty societies, to other organizations, to the Congress, to the White House, to other parts of this country and across the world. Senator Lugar's remarks this afternoon reminded me very much of the statement H.L. Meinken said about politics. H.L. Meinken said that "the problem with democracy is that as soon as the organization finds out that it can vote itself the treasury, it becomes anarchy." And I think that Senator Lugar's remarks pointed out the very fact that this is what is happening. In fact, they say that the weight of a congressman (this is the Archimedes principle of politics) is bouyed by a force equal to the weight of the pork in his barrel. I suspect that is also the situation with many of the congressmen who go to Congress as he indicated, and expect to vote themselves and their public more programs. It is a pleasure to be here and I am reminded of a comment of one of the guests who came up to me after I had given a speech not too long ago and said, "Dr. Rial, that was the most wonderful speech I have ever heard. It was just superfluous. I hope you will soon have it published." And I said, "Well, I thought perhaps I might have it published posthumously." She said, "Oh, wonderful, the sooner, the better."



William Y. Rial, M.D., President of the American Medical Association, addressed a session of the House of Delegates.

Well, you know, we have a terrible image, and I need say nothing more about that from the point of view of the cartoon that was in yesterday morning's *Miami Herald*. This is a responsible newspaper yet that cartoon was the most despicable type of smear that I have ever seen of a group of individuals. Now obviously cartooning is a valid form of editorial comment. But this was, in my opinion, stooping to a new low. And so I sat down this morning and started to write a letter to the Editor of the *Miami Herald* and yet the longer I wrote, the madder I got, the more my blood pressure went up, and I decided that to respond to this would only be to give some credence to it. What we need to do friends is to enhance our image by some of the things that you are already doing. I think particularly of what has happened in those county medical societies and state medical societies who have gathered together to provide health care to the unemployed and those who have become uninsured or destitute, medically speaking, because of the circumstances of their unemployment. We met with the President some weeks ago in the White House and after I presented him with a list of those state and county medical societies involved in the provision of health care to the unemployed, he wrote me the following letter. It expresses what the public feels about those members of the profession who provide these services as an obligation of licensure in whatever state they may be in. He said the following:

> I enjoyed our meeting very much last Tuesday and I thank you. I have read your report and I am overwhelmed by the extent of the voluntary program. I knew that there were others besides Harris County, Texas but I was unprepared for the nationwide scope of what can only be termed "the movement to provide health care for the needy." Thank you again and God bless all who are engaged in that noble effort.
>
> Sincerely,
>
> Ronald Reagan

I think, friends, that this does indeed describe what has happened. I spoke to a reporter from CBS News about this and he said that when he had talked to other county and state societies that are involved in this, many of them said, "What's the big deal? We've done this all along." And indeed, I think we have. Unfortunately, this is not the kind of news that makes good editorial comment. We get damned as described in the editorial in a recent edition of your *Journal of the Florida Medical Association* concerning the cost of medical care. And yet last Tuesday I had the privilege of being with Dr. Kirkland, the thoracic surgeon at the University of Alabama in his operating rooms. Unfortunately, he was not operating that day, but his very able assistant, Dr. Al Pacifico, operated on a tiny little baby no bigger than this total length — opened the chest, opened the heart, repaired an atrial defect with a piece of teflon, no bigger that that, and repaired the ventricular defect with a piece of pericardium, slightly larger. This baby will now grow up to have a normal life and life span. But that operating room was full of people and the machine and heart-lung preparation they used while the baby was on the bypass looks like a computer console out of Star Trek. And people wonder why the cost of medical care is so high. Yet this baby has been restored to what will be a normal life span. Yet ten years ago that baby would not have been able to live more than two or three more years. Soon after the doctor finished that procedure we went into another operating room where he did a bypass on a male approximately my age who was an invalid as a consequence of his anginal failure. They opened his heart, put him on a bypass machine and did a coronary artery bypass totaling four or five procedures. This man will now be restored to human life and health. He will be able to play golf and tennis again. He will be able to enjoy his family again in the fuller fruit of his mature years. And people wonder why it costs so much to do this. Twenty years ago that man's life would not have been spared. He would have lost his life as a consequence of his coronary artery disease. We are responsible, however, because we do indeed act as the purchasing agent for our patients and we order these tests. We order these procedures. We are the ones who are responsible and we must continue to do all that we can to improve our image. You people are very much involved in the professional liability situation here. And those of you who saw the movie, *The Verdict*, must have come out of there with the same feeling of depression that I did. The film was beautifully done but it was done in tones of brown and sepia and you were left with a depressed feeling. Everybody in the case came out of it smelling like a barnyard. The hospital, the church that owned the hospital, the doctors, the lawyers who defended the case, the lawyers who prosecuted the case, the court, the judge, the nurses involved in the case, combined to make it a very depressing thing. Those of you who saw it remember that when the verdict was announced the judgment was against the doctor. He was pronounced guilty and then the jury foreman said to the judge, "Your Honor, may we award the plaintiff more damages than they requested?" And the judge said, "Yes, you may" and applause broke out in the theatre. That is the kind of situation you and I face, friends. This is the kind of image that is presented to the public and we must do what we can to correct it. Now, therefore, I encourage you to continue to do what you are doing in states and counties across this nation in improving the quality of care and providing care for those individuals who have become unemployed. Because those are the things which will begin to improve our image. Let me conclude with a comment or two about the FTC and the JCAH. One of our problems of not being able to improve our image is because the courts took away the right of physicians to discipline other physicians. We had the only thing that the county society could do to kick the member out and when the courts took away our right to demand membership in the county society as a prerequisite for hospital privileges, they took away the only real weapon that we had left. Now let me tell you about an example and I am not doing this to polish my halo because nobody is perfect. I was asked by the District Attorney of Delaware County, Pennsylvania, to testify against a doctor who is prescribing Ludes and Valiums for anybody who would walk in off the street. In fact, the way that they found him was that the patients had to come in and get a number off the wall, like the baker shop or the butcher shop. While they were waiting, some of them went outside and flaked out on the neighbors lawn and the neighbors called the police because here were patients lying out on the lawn. The District Attorney asked me to testify against him and I felt that since I was Speaker of the House, this was an inappropriate activity for an Officer of the AMA. He said, "Doctor, you are the 32nd doctor I have called." So I decided I had to fish or cut bait and I agreed to testify and the man was guilty as sin. There was no question about it.

But the problem, friends, is that after testimony all day long, from ten in the morning until four in the afternoon with an hour for lunch, I was treated to the most unfriendly treatment you can imagine. For example, the first question the defense counsel asked me was, "Now, Doctor Rial, isn't the first question you ask the patient, 'Do you have Blue Cross/Blue Shield?" I turned to the judge and said, "Your Honor, I consider that insulting. Is it necessary that I answer that?" And the judge was fortunately with me on this. At any rate, it was the same attorney, A. Charles Parudo, who defended Tony Boyle of United Mine Workers infamy. The next day my testimony must have been fairly damaging because I was handed a subpoena to be in court with all my patient records for the previous two years. I had to get an attorney to quash the subpoena and the upshot of it was that he was convicted after a seven week trial. Now imagine that. It took seven weeks to try a man for this. Convicted after a seven week trial, he was sentenced a year later and one year later the Superior Court overturned the sentence because the District Attorney subpoened all the doctor's records, not just those who were guilty of taking drugs. Friends, there is so much due process, there is no justice. That is part of our problem. Well, that is part of our problem with the Federal Trade Commission and that is

why the paper said the doctors won a special privilege. We do not want a special privilege; we want to have the authority and right to discipline our members. But the problem is that the courts took it away from us and that is one of the problems that we face. When we were trying to rewrite the standards for the Joint Commission, we said that anybody sick enough to be in the hospital ought to be under the care of a fully licensed physician. This seemed to be so obvious that it needs no explanation, and yet the Federal Trade Commission's action — the chilling effect of their action against the AMA, the New Haven County and the Connecticut State Medical Society — was such that no medical societies are willing to take appropriate disciplinary action, particularly with respect to fees, because of the action of the FTC. As a result, in trying to rewrite the standards we took out the word "medical" from medical staff. Our lawyers said that "medical" says to all other health care practitioners, whether they are podiatrists, optometrists, clinical psychologists, or any other unmentionable individuals, that the hospital's exclusive property from an economic point of view are fully licensed physicians. Fortunately, there is change in the FTC's attitude. Joe Boyle and I, who is here now with you, along with Jim Sammons, went and met with Mr. Miller of the Federal Trade Commission. As a consequence of this meeting, our lawyers have begun to do some talking and the FTC has now gone to The Hill with a new recommendation when the authorization for the FTC comes up again. This new authorization will spell out the fact that in those areas of price fixing or boycott, the FTC has the right to step in. But in those issues where quality of care is a primary concern, they will apply the rule of reason. We believe that this is a salutory effect and that we can now restore the term "medical" to staff and we will restore the words "in acute care general hospitals." The reason that is necessary is because JCAH also accredits podiatry hospitals and some clinical mental health facilities which have a predominance of clinical psychologists. But in acute care general hospitals, a majority of the members of the Executive Committee must be fully licensed physicians. We believe that this, too, will be salutory and will restore the right of the medical staff to prescribe what will be the proper standard of care in all of the hospitals across this country.

Let me conclude, friends, because I know you have a lot of business to do, with a comment made by John Winthrop some four hundred years ago when he became the first Governor of Massachusetts facing a similar frontier of problems and promise when he arrived in the New World. In assessing the situation and the crucial needs of his constituents, Governor Winthrop said:

> "There is only one way to provide for our posterity. We must knit together as one individual. We must delight in each other, make each other's condition our own, rejoice together, mourn together, labor and suffer together."
>
> I commend these sentiments to your Association.
> Good day and God bless.

The Speaker then recognized Dr. Edward Annis from the Floor who wished to address the House.

Edward R. Annis, M.D.

Mr. Speaker and members of the House. We heard a speech a few moments ago from the President of the American Medical Association. He indicated that the Chairman of the Board was present and told you of some of the serious problems that all of us are aware of nationwide which threaten our profession. It is a war and, as in all wars, the first victim is truth. Well, the same is true in the malpractice program here in Florida. The previous speaker gave just tribute, I believe, to our past presidents who acted in 1975 when every commerical carrier withdrew malpractice coverage in the state of Florida. Those who have taken over the responsibility of providing coverage have also instituted a program of malpractice prevention and risk management in an effort to educate physicians as to what they can do to prevent themselves from having an allegation of malpractice. At the same time, we continue to fight a Trial Bar that dominates the thinking of the Supreme Court where one of its members sits; dominates both Houses of our currently-in-session Legislature; dominates the House as its Speaker, and has key members of the Trial Bar in key positions as chairmen of committees. Those who deal with the problem everyday, such as the reference that was made to the Generals, are much more cognizant of the extent of the problems than the troops in the trenches who are farther removed from the essential principles of combat. I have had an opportunity for the past couple of years to view at fairly close range the week by week action taken by the members of your Reciprocal Board. I could not sit here after listening to some of the criticisms of the Reciprocal and its management company, PIMCO, much of it unrelated to coverage and many of the allegations involving suits where the FPIR was not even involved. Many of the criticisms come from those who have at no time either been insured by or associated with FPIR. I ask this House to give just tribute not only to its five past presidents but the attorney-in-fact, the man who is operating a system for you. Had it not been for their vision, their foresight and their consistent action, we would not have any kind of malpractice coverage today. Because of their leadership, we are going to continue to battle with the Trial Bar until such time, in spite of a hostile press, we get the message to the people of Florida and achieve the relief that is justified.

I believe it is only fair and just and right that this House give real acclaim to those who had the vision and foresight to pull us out of a tight situation and continue to give us that kind of leadership today.

Thank you.

Dr. Perry, Speaker, requested that the members of Reference Committee No. I come to the podium to give their report.



FMA President and Mrs. Robert E. Windom, M.D.

Report of Reference Committee No. I Health and Education

Dr. Calvin W. Martin, Chairman, and his Committee came forward to present the report of Reference Committee No. I, Health and Education.

Report A of the Board of Governors

Recommendation No. A-1 was adopted.

Recommendation No. A-2 was adopted.

The Reference Committee moved an amendment to Attachment I of Report A for clarification in the wording of point "A" to be changed to read ". . . and must be a specialty or subspecialty recognized by the Council on Specialty Medicine". The motion carried and Attachment I of Report A of the Board of Governors was adopted as amended.

Report A of the Board of Governors was adopted as amended.

Report A of the Board of Governors

Robert E. Windom, M.D., Chairman

COUNCIL ON SCIENTIFIC ACTIVITIES

1983 Annual Meeting — The Board established the format for the 1983 Annual Meeting and approved a scientific theme "The Health Care Team: Interact '83" which relates to the interaction of the health care team including physicians and other allied health professions for delivery of quality medical care. FMA members can earn up to 20 hours of continuing medical education credit during four days of scientific program scheduling.

Smoking in Scientific Sections — The Board of Governors approved a recommendation which prohibits tobacco smoking in scientific sections in all future FMA Annual Meetings.

FMA Journal — The Board was pleased to learn that *The Journal of the Florida Medical Association, Inc.*, has been chosen as the outstanding state medical journal in the nation for 1982 and will be this year's recipient of the Sandoz Award. Criteria for this award includes content, good design and quality in writing, cover design and photography. This important and prestigious award will be accepted on behalf of the FMA by Dr. Daniel B. Nunn, Editor, at the 1983 FMA Annual Meeting.

The Board enthusiastically approved the nomination of Daniel B. Nunn, M.D., of Jacksonville, for reappointment as Editor of *The Journal* for 1983-84. Special appreciation and commendation was extended to Dr. Nunn, the entire editorial board and those who participated in *The Journal's* publication for all of their contributions.

ACCME Handbook — The House approved a recommendation of the Council on Scientific Activities that Florida's delegates to the AMA submit a resolution to the AMA House of Delegates urging the publication of the *ACCME Handbook*. The Florida AMA Delegation submitted this resolution for consideration at the 1982 Annual Meeting and a report of the actions of the House is included in the Annual Report of the AMA Delegates in the *Delegates Handbook* (Reference Committee III).

Foreign Medical Schools — The Board reviewed a report of the Committee on Medical Education dealing with foreign medical schools. According to the United States General Accounting Office there are approximately 11,000 United States citizens studying medicine abroad. While it is recognized that there are high quality foreign medical schools in existance, problems are created by those schools which do not meet the standards of U.S. medical schools in admission requirements, facilities, equipment, faculty, curriculum or clinical training.

Moreover, there is presently no adequate procedure for evaluating the quality of education and training provided by foreign medical schools. A major concern is that medical schools must depend on affiliations with teaching hospitals to provide a variety of quality clinical experience. Florida is faced with a major problem of foreign medical schools entering agreements with no teaching hospitals to provide core clerkships. The Board feels that such arrangements are highly undesirable since the foreign medical schools typically maintain no supervision and often the teachers are not qualified medical educators.

The Florida State Board of Medical Examiners generally does not approve clinical training programs for foreign medical school students, nor are they aware of the extent to which such programs existed. Additionally, many Florida physicians find themselves under pressure from families of U.S. citizen foreign medical school graduates to accept these graduates into clinical programs. These physicians have no "policy standards" to fall back on to deny admission.

RECOMMENDATION NO. A-1

THAT THE FLORIDA MEDICAL ASSOCIATION REQUEST THE FLORIDA HOSPITAL ASSOCIATION, INC., AND THE FLORIDA STATE BOARD OF MEDICAL EXAMINERS TO ENDORSE THE CONCEPT THAT UNDERGRADUATE MEDICAL EDUCATION BE CONDUCTED IN THE STATE OF FLORIDA ONLY BY APPROPRIATELY ACCREDITED EDUCATION SYSTEMS, EVEN IF LEGISLATIVE CHANGES ARE REQUIRED.

COUNCIL ON SPECIALTY MEDICINE

Specialty Group Recognition Program — The Board considered a recommendation from the Council to amend the current criteria for specialty group recognition (included in the *Delegates Handbook)* by adopting additional criteria for recognition.

RECOMMENDATION NO. A-2

THAT THE HOUSE OF DELEGATES APPROVE THE ADDED CRITERIA FOR SPECIALTY GROUP RECOGNITION:

- **THAT SPECIALTY GROUPS BE REQUIRED TO PARTICIPATE IN THE FLORIDA MEDICAL ASSOCIATION ANNUAL MEETING AT LEAST ONCE EVERY THREE YEARS: AND**



Reference Committee I examined all business related to health and education. Left to right: Kay K. Hanley, M.D., Clearwater; Robert E. Boyett, M.D., Miami; Ms. Kriss Hanley, Recorder; Calvin W. Martin, M.D., Arcadia, Chairman; Wm. Donald Walklett, M.D., Jacksonville; and John M. Canakaris, M.D., Bunnell.

THAT, PARTICIPATION IN JOINT SCIENTIFIC SECTIONS AT THE FMA ANNUAL MEETING QUALIFY THE PARTICIPATING SPECIALTY GROUPS AS MEETING THIS CRITERIA; AND FURTHER THAT THE COUNCIL ON SPECIALTY MEDICINE MONITOR THE FMA-RECOGNIZED SPECIALTY GROUPS TO INSURE THIS CRITERIA IS BEING MET. IN ADDITION, FMA SPECIALTY GROUPS ARE STILL REQUIRED TO MEET THE CONTINUING MEDICAL EDUCATION REQUIREMENTS IN RECOGNITION.

Florida Allergy Society — The Board approved recognition of the name change of the Florida Allergy Society to the Florida Allergy and Immunology Society.

International College of Surgeons — The Board approved a status of full recognition for the International College of Surgeons, Florida State Surgical Division under the FMA's specialty groups recognition program.

Physical Therapist Act — The Board expressed continued opposition to a rewriting of the Physical Therapist Act if it broadens the scope of their practice and takes them out from under the prescription requirements of a physician.

Hospital Licensure Law — The Board of Governors directed that the FMA not seek changes in the Hospital Licensure Law.

Trauma Center Law — The Board voted to seek changes in the Trauma Center Law passed during the 1982 Session of the Legislature to allow for more flexibility in the verification standards. The Board authorized the Department of Health and Rehabilitative Services to utilize segments of the Florida Medical Foundation's Trauma Verification Program Proposal in administering the state program.

Pediatric Clinic — The Board endorsed the concept of a clinic for the provision of ongoing medical care for Medicaid eligible and indigent children such as the one being developed in Hillsborough County.

Annual Meeting Structure and Format — The Board of Governors requested the Council on Scientific Activities to evaluate the structure and format of the FMA Annual Meeting and make recommendations to the Board regarding the arrangements, length and content of the Annual Meeting for possible implementation of changes in conjunction with the 1984 Annual Meeting to be held in Lake Buena Vista, Florida. The evaluation should include a survey of the House of Delegates and consultation with the Speaker of the House. The study subsequently was carried out under the premise that participation in the Annual Meeting by FMA members is vital to the success of organized medicine in Florida. The Board subsequently received a comprehensive report and recommendations for changes in the Annual Meeting format. This report was referred to the FMA Executive Committee which serves as the Finance Committee and Long Range Planning Committee of the Association for review and recommendations prior to final actions by the Board of Governors.

Attachment I
Report A
of the
Board of Governors

COUNCIL ON SPECIALTY MEDICINE
Criteria for Specialty Group Recognition

A. That the organization's purpose and need not be covered by an already existing organization and must be a specialty or subspecialty recognized by the Council on Specialty Medicine;

B. That there is a sufficient number of physicians seeking the privileges of society;

C. That the organization must have held at least two annual meetings at which a quorum was present prior to the time of application, and must continue to have an annual meeting each subsequent year of recognition;

D. That a constitution and/or bylaws state its organizational structure, purpose and aims;

E. That the membership will abide by the "Principles of Medical Ethics" of the FMA and AMA;

F. That the organization provide continuing medical education to its members;

G. That the organization have statewide representation;

H. That 100% of the active eligible members shall be members of the FMA (a 10% variation may be allowed by the Board of Governors); and

I. That the attendance record of the Council representative will be considered at the time of recognition.

Report G of the Board of Governors

The Reference Committee moved that Report G of the Board of Governors regarding the establishment of a liaison committee to the Florida Physicians' Insurance Reciprocal and other insurance carriers be tabled and considered with Resolution 83-20, Liaison Committee to the Florida Physicians' Insurance Reciprocal. Motion carried unanimously.

Report of the Council on Scientific Activities

The Report of the Council on Scientific Activities was adopted.

Council on Scientific Activities

Henry M. Yonge, M.D., Chairman

The Council on Scientific Activities has had an extremely active year meeting four times in conjunction with meetings of component committees and subcommittees. Council and committee business was conducted on August 20, November 12, and December 3 in Tampa. The Council completed its work as part of the January 28, 1983, meeting of the Committee on Medical Education in Orlando. The Council's work is summarized under the heading of each committee and subcommittee.

Committee on Medical Education

Calvin W. Martin, M.D., Arcadia, has completed a highly successful year as Chairman of this Committee. Dr. Martin's experience in scientific activities and continuing medical education has proved invaluable throughout the year. In addition to his continuous and close involvement in all Committee activities, Dr. Martin also represented the Florida Medical Association at a meeting in Chicago of the Accreditation Council for Continuing Medical Education (ACCME). With the newly approved *Essentials for Accreditation of Sponsors of CME* effective January 1, 1984, Dr. Martin's knowledge and experience becomes even more valuable. Additionally, the proposed Protocol for the *Recognition of State Medical Societies to Accredit Intrastate CME Sponsors* has alerted this Committee to the need to closely monitor the procedures within the Florida Medical Association relating to the accreditation of CME sponsors.

Subcommittee on Annual Meeting Scientific Program

Under the leadership of Orris O. Rollie, M.D., Orlando, the Subcommittee has produced an outstanding scientific program in collaboration with FMA recognized specialty groups. A highlight of the scientific program will be the FMA sponsored symposium "Health Care Team: Interact '83", to be held Thursday, May 5, 1983. This symposium will include representatives from Nursing, Respiratory Therapy, Pharm. D., Social Work, and Physical Therapy. President Robert E. Windom, M.D., will moderate the presentation and President-Elect J. Lee Dockery, M.D., will present a summary at the conclusion of the program. Additional attractions will include a program on chemical dependency, a program on medico-economics, Wyeth Auto-Tutors, Pfizer "Dialogue" Programs, and many technical, scientific and educational exhibits.

Once again the annual meeting scientific program will offer a total of twenty hours of Category I approved continuing medical education credit. The annual meeting scientific program again proves to be one of the most economical and efficient avenues for earning CME credit offered to Florida physicians.

In addition to its responsibilities for the annual meeting scientific program, this Subcommittee has completed the task of conducting a survey on the annual meeting format. Members of the House of Delegates, specialty group presidents, county medical society presidents, and a group of randomly selected FMA members were surveyed and responses were recorded from 225 physicians. Based on the survey's results, recommendations for format changes have been forwarded through the Council on Scientific Activities to the Board of Governors.

Subcommittee on Accreditation

Samuel E. Crockett, M.D., Orlando, has continued his effective leadership as Chairman of this Subcommittee. Although the ACCME *Essentials* are not effective until January 1, 1984, this group has already begun to use these as standards for assessing the quality of CME programs offered throughout the state. The following actions have been taken by the Subcommittee since the last Annual Meeting:

1. **Florida Division, American Cancer Society**, Tampa — Reaccredited for a six-year period, August 20, 1982 to August 19, 1988.
2. **American Heart Association, Suncoast Chapter**, St. Petersburg — Provisionally accredited for a two-year period, August 20, 1982 to August 19, 1984.
3. **Boca Raton Community Hospital, Inc.**, Boca Raton — Reaccredited for a six-year period, April 18, 1982 to April 17, 1988.
4. **Bayfront Medical Center**, St. Petersburg — Provisionally accredited for a two-year period, December 17, 1982 to December 16, 1984.
5. **Lakeland Regional Medical Center**, Lakeland — Provisionally accredited for a two-year period, February 8, 1982 to February 7, 1984.

Subcommittee on Program Approval

Chairman David S. Hubbell, M.D., St. Petersburg, and his Subcommittee have provided an outstanding service to CME providers in Florida who have sought FMA Mandatory Credit for their programs. Each program application has been thoroughly reviewed. Only quality programs have been allowed to offer FMA Mandatory Credit. Over 380 programs were approved in 1982 offering over 3,200 hours of mandatory credit.

Subcommittee on Graduate Medical Education

This Subcommittee, chaired by Ira B. Harrison, M.D., Tallahassee, tackled the increasing problem of foreign medical school graduates in Florida. A comprehensive report was prepared and recommendations were made to the Council on Scientific Activities to be forwarded to the Board of Governors.

Committee on Scientific Publications

Daniel B. Nunn, M.D., is completing his third successful year as Editor of *The Journal of the Florida Medical Association, Inc.*, and Chairman of the Committee on Scientific Publications. Moreover, Dr. Nunn has been reappointed to serve for a fourth year. The Committee met in Tampa on August 21, 1982 and again on March 5, 1983. The latter was the annual joint meeting of the Committee on Scientific Publications and consulting editors and featured an address by George D. Lundberg, M.D., Editor of *The Journal of the American Medical Association.*

Since April 1982, *The Journal* has had an impressive new design which has attracted wide recognition throughout the medical community and media. Additionally, *The Journal* continues to strive for outstanding covers to introduce the reader to each month's lead article. A valuable addition to this effort has been the regular inclusion of cover art by Andre Renard, M.D., a plastic surgeon practicing in Jacksonville.

Special Issues

Special Issues continue to be an exciting addition to each year's series of monthly publications. Since last May, another well received historical issue was produced by guest editor, William M. Straight, M.D.; an issue of great importance focusing on the professional liability insurance crisis was printed in March; and April included the annual FMA Auxiliary Issue on Learning Disabilities. The remainder of 1983 looks exciting with the promise of issues on perinatology, computers in medicine, and a symposium issue on substance abuse.

Report of the Council on Specialty Medicine

The Report of the Council on Specialty Medicine was adopted.

Council on Specialty Medicine

Arthur L. Eberly Jr., M.D., Chairman

The Council on Specialty Medicine held three meetings during the Association year 1982-83: June 26, 1982; October 23, 1982; and February 19, 1983, all in Orlando, Florida. In addition, the Subcommittee on Recognition for the specialty groups held meetings in conjunction with all three Council meetings and participated in one telephone conference call. A special committee was appointed by the Chairman to consider and make recommendations regarding needed changes in Florida's Handicapped Parking Law. The Chairman appointed another special committee to make recommendations to the Council regarding the need for a liaison committee to the Florida Physicians' Insurance Reciprocal and other professional liability carriers.

The Council grew in size and now is composed of 38 FMA recognized specialty groups representing all major areas of medical practice. Some of the issues considered by the Council during this Association year have been:

1. **Pediatric Clinic:** The Council endorsed the concept of a clinic for the provision of ongoing medical care for Medicaid eligible and indigent children such as the one being developed in Hillsborough County.
2. **International College of Surgeons:** The Council considered and approved a request from the International College of Surgeons for full FMA recognition.
3. **Revised Recognition Application:** The recognition application was simplified. At the request of the Board of Governors, the Council considered a requirement for participation by specialty groups in the FMA Annual Meeting as a criterion for recognition. The Council recommended to the Board that specialty groups be required to participate in the FMA Annual Meeting at least every three years; and that, participation in joint scientific sections at an FMA Annual Meeting would qualify the participating specialty groups as meeting this criterion; and further, that the Council monitor the FMA recognized specialty groups to insure this criterion is being met. FMA specialty groups are still required to meet the continuing medical education requirements in recognition.
4. **Florida Allergy and Immunology Society:** The Florida Allergy Society's request for a name change was approved.
5. **Trauma Center Law:** The Council twice considered the Florida Trauma Center Law and recommended that the FMA seek changes in the law to allow for more flexibility.
6. **Changes in Hospital Licensure Law:** The Council recommended that the FMA seek changes in the Hospital Licensure Law so that authority rests with the medical staff for approving medical privileges.
7. **Optometrists Use of Drugs:** Once again the Council requested the FMA to continue its support in opposing legislation that would allow the use of drugs by optometrists.
8. **Physical Therapy Law:** Twice the Council considered a proposed rewrite of the Physical Therapy Law and recommended that the FMA actively oppose such a rewrite unless it is guaranteed that no initiation of treatment, evaluation or modification of treatment be done without a specific prescription from a physician; and further, that electromyographies not be performed unless a physician is present in the room.
9. **Handicapped Parking Law:** Recommended changes in the Handicapped Parking Law as follows:
 a. That the permanent disability parking permit be renewable every two years and that it not be in the form of a metal license tag but of heavy cardboard placed in the window of the vehicle with the signature of the disabled person on the form.
 b. That a temporary permit be made available and issued for a six month period, not only to those with a temporary disability but also to visitors to the state who are disabled.
 c. That the formula for the amount of handicapped parking be based upon the number of permits issued and not a fixed population ratio.
 d. That the responsibility for abuse rest with the owner of the permit and not the driver of the vehicle.
10. **Hearing Standards for Bus Drivers:** The Council requested that the Council on Medical Services review the current hearing standards for school bus drivers as implemented by the Florida Department of Education.
11. **Liaison Committee to the Board of Trustees of the FPIR and Other Professional Liability Carriers:** Members of the Council were of the opinion that a liaison committee to the Florida Physicians' Insurance Reciprocal and other professional liability carriers would aid greatly in assisting to improve the flow of information and relationships between the carriers and the general FMA membership. Concern was expressed over an understanding as to how claims are handled, the day-to-day operations of the FPIR and PIMCO and the responses to individual inquiries.

Numerous other issues were discussed and considered by the Council, most of which were informational items such as rules and regulations promulgated by DHRS and DHHS which impact on medicine.



Jacksonville surgeons Samuel M. Day, M.D. (left) and Clyde M. Collins, M.D., are seen at the convention almost every year.

Report of the Florida Medical Foundation

Florida Medical Foundation Committee on Continuing Medical Education

Medical Student Loans

The items in the Florida Medical Foundation Report on Committee on Continuing Medical Education and Medical Student Loans were adopted. [See Report of the Florida Medical Foundation on page 539.]

RESOLUTION 83-5
Limitation of Use of Low Emission Lasers

Dade County Medical Association

The motion of the Reference Committee that Resolution 83-5 be referred to the Board of Governors carried.

RESOLUTION 83-5
Limitation of Use of Low Emission Lasers
[Not Adopted — Referred to the Board of Governors]

RESOLUTION 83-5

Limitations of Use of Low Emission Lasers

Dade County Medical Association

Whereas, The use of low emission lasers is approved only for experimental purposes and not for use in cosmetic facial surgery; and

Whereas, The depth of penetration and energy level of the laser beam from these instruments is such that they can only induce a transient rejuvenation effect due to edema; and

Whereas, Claims equaling this transitory effect to improvements achieved with cosmetic surgery could constitute dissemination of false and misleading information; therefore be it

RESOLVED, That members of the Florida Medical Association be encouraged to refrain from using this procedure for purposes of cosmetic surgery; and be it further

RESOLVED, That the Florida Medical Association make every effort to inform the public that the use of low energy lasers at best is ineffective in affecting facial rejuvenation.

RESOLUTION 83-20
Liaison Committee to the Florida Physicians' Insurance Reciprocal

St. Lucie-Okeechobee County Medical Society

A substitute for Resolution 83-20 was offered by the Reference Committee, and an amendment from the floor was moved. The motion carried and Substitute Resolution 83-20 was adopted as amended.

SUBSTITUTE RESOLUTION 83-20
Liaison Committee to the Florida Physicians' Insurance Reciprocal

RESOLVED, That the Board of Governors establish a 5-member standing committee entitled the Liaison Committee to the Florida Physicians' Insurance Reciprocal. The committee shall be composed of five physicians recommended by, but not necessarily members of, the Council on Specialty Medicine and approved by the Board of Governors. All members of the Liaison Committee to the Florida Physicians' Insurance Reciprocal shall be insured by the Florida Physicians' Insurance Reciprocal. This committee shall be constituted for the purpose of enhancing member confidence in PIMCO and the Reciprocal and will attempt mediation of these problems. The Committee may recommend policy to PIMCO and the Florida Physicians' Insurance Reciprocal. The Committee shall meet at least twice annually with the Board of Directors of PIMCO and the Florida Physicians' Insurance Reciprocal.

Report G of the Board of Governors

Report G of the Board of Governors was adopted.

Report G of the Board of Governors

Robert E. Windom, M.D., Chairman

The Florida Medical Association Board of Governors at its meeting March 12, 1983, considered the recommendation of the Council on Specialty Medicine that a Liaison Committee to the Florida Physicians' Insurance Reciprocal and other professional liability carriers be established.

The Board referred the Council's recommendation to the President and President-Elect of FMA with a statement of Board policy and instructions for them to meet jointly with the Council on Specialty Medicine, members of the Reciprocal Board, and the Attorney-in-Fact/President of the Reciprocal and Chairman of the PIMCO Board to discuss all questions and concerns submitted regarding the Reciprocal and its management company, PIMCO. A copy of the Board policy as mentioned herein is included at the end of this Report. Drs. Astler and Thames, Reciprocal Board members and members of the Board of Governors, did not participate nor vote regarding this subject.

Your President and President-Elect, in concert with the Chairman of the Council on Specialty Medicine, on March 14 called a special meeting to be held on April 9, 1983, to carry out the directives which the Board of Governors requested at its meeting on March 12, 1983.

When only one letter had been received from the 38 members of the Council on Specialty Medicine posing any questions, and only eight of the Council members indicated enough interest to attend the meeting, I deemed it advisable to cancel the meeting.

Subsequent to the cancellation of the meeting, two letters were received and have been responded to in detail by the Chairman of the Board of the Reciprocal. The letter received from the representative of the Florida Society of Otolaryngology — Head and Neck Surgery posed questions which have been asked and answered repeatedly. Most of these questions were presented to the House of Delegates in May 1982 and were addressed by the Reciprocal President. A copy of these remarks were printed in the July 1982 Proceedings Issue of *The Journal of the Florida Medical Association, Inc.*



FMA's retiring and incoming "first couples" managed to spare a few minutes from their hectic schedules to oblige The Journal's photographer. At left are Incoming President and Mrs. J. Lee Dockery, M.D. Retiring President and Mrs. Robert E. Windom, M.D., are at right.

The Chairman expressed his appreciation to all members of the Association who provided guidance and counsel. Special thanks were conveyed to Dr. Richard G. Connar, Dr. Sanford A. Mullen, and Dr. Charles J. Kahn who represented the AMA Delegates at the meeting of the Reference Committee. Dr. Martin also expressed his sincere appreciation to the members of the Committee and to the FMA staff, Robert C. Fore, Ed.D., Mr. Philip H. Gilbert and Ms. Kriss Hanley for their assistance in the preparation of the report.

The motion of the Reference Committee that the Report of Reference Committee No. I be adopted as amended carried.

The Board of Governors will continue in a responsible manner to answer inquiries from members of the Association regarding programs the FMA sponsors and correct deficiencies in programs when possible or recommend the sponsorship be terminated.

Board of Governors Policy Statement Adopted March 12, 1983

RE: Recommendation No. 3 — Liaison Committee to the Florida Physicians' Insurance Reciprocal from the Council on Specialty Medicine

The Board of Governors referred this recommendation to the FMA President and President-Elect with the following statement of policy:

1. The FMA's Charter and Bylaws provide for a representative of the Reciprocal to serve on the Board of Governors at a policy level to assure proper monitoring and liaison between the FMA and its creation, the FPIR.
2. Five knowledgeable physicians who were honored by election to the office of President of the FMA were selected by the FMA to serve as the Board members of the Reciprocal.
3. FMA records reveal voluminous information from the Reciprocal (and PIMCO) to the House of Delegates, Board of Governors, members of the FMA, its insured physicians and specifically the Council on Specialty Medicine.
4. The Board has a special Committee on Professional Liability Insurance which has performed in a profound manner and composed of extremely knowledgeable physicians regarding this subject.
5. That the Chairman of the Council on Specialty Medicine have each member of the Council (over his signature) pose every question and concern he has regarding the Reciprocal, its management company, PIMCO, and forward it directly to the FMA President.
6. The FMA President and President-Elect meet jointly with the Council on Specialty Medicine, the members of the Reciprocal Board and the Attorney-in-Fact/President of the Reciprocal (who is also Executive Vice President of the FMA and Chairman of the Board of PIMCO) and is responsible for implementation of Reciprocal policies which are all determined by the Reciprocal Board.
7. The President report to the Board of Governors the results of this meeting with any recommendations he deems appropriate.



During his tenure as President of FMA, Robert E. Windom, M.D., was often in front of and behind a camera. This was one of those rare cases in which he was on both sides at once.



Dr. and Mrs. Jere W. Annis of Lakeland were in their usual good spirits at the Annual Meeting.

Report of Reference Committee No. II Public Policy

Dr. Perry called the Chairman and members of Reference Committee No. II, Public Policy, to present their report.

Dr. H. Quillian Jones, Jr., Chairman, and his committee came forward to present the report of Reference Committee No. II, Public Policy.

Report B of the Board of Governors

Report B of the Board of Governors was adopted as amended.

Report B of the Board of Governors

Robert E. Windom, M.D., Chairman

FMA Councils and Committees

COUNCIL ON MEDICAL SERVICES

AMA Jail Project — The Board approved FMA's continued participation in the American Medical Association's Jail Project as part of the on site survey team for accreditation. The jail in Orange County was reaccredited and the jail in Broward County was accredited for the first time.

Public Health Program — The Board strongly encouraged the development of accredited graduate programs in public health and offered the voluntary assistance of the FMA Committee on Public Health in an advisory capacity to graduate public health education and research.

Public Health Officer — The Board recommended to the Department of HRS that the Director of the State Health Program Office be designated as the State Health Officer and that such an officer hold an M.D. or D.O. degree.

Public Health Funding — The Board received a report from the Council that stressed the importance of developing a more practical solution of distributing public health services and funds.

RECOMMENDATION NO. B-1

THAT THE HOUSE OF DELEGATES APPROVE FMA'S WORKING WITH THE LEGISLATURE AND THE DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES TOWARDS ACHIEVING A MORE PRACTICAL SOLUTION OF DISTRIBUTING PUBLIC HEALTH SERVICES AND FUNDS.

Environmental Hazards — The Board recommended to the Department of Health and Rehabilitative Services that it obtain health staff with appropriate expertise in handling environmental health to be coordinated with the new section on epidemiology.

School Health Education — The Board reviewed a report from the Council which stressed the importance of exposing high school students to information on various health problems that may affect lifestyles.

RECOMMENDATION NO. B-2

THAT THE HOUSE OF DELEGATES APPROVE FMA SUPPORT FOR APPROPRIATE MEASURES TO INCREASE THE EXPOSURE OF HIGH SCHOOL STUDENTS TO EDUCATION INFORMATION ON CURRENT HEALTH PROBLEMS THAT MAY AFFECT THEIR LIFESTYLE IN THE FUTURE.

Legal Drinking Age — The Board endorsed proposed legislation to raise the legal drinking age in Florida from 19 to 21 years of age as a way of curbing many of the tragic accidents that are occurring on Florida's highways involving our youth.



Reference Committee II (Public Policy) was chaired by H. Quillian Jones Jr., M.D., Fort Myers. Left to right: James T. Cook III, M.D., Panama City; Ms. Dawn Bouchard, Recorder; Dr. Jones; Joseph Harris, M.D., Miami Beach; and Stanley S. Goodman, M.D., Fort Lauderdale.

RECOMMENDATION NO. B-3

THAT THE HOUSE OF DELEGATES ENDORSE LEGISLATION THAT RAISES THE LEGAL AGE FOR ALCOHOLIC CONSUMPTION AND PURCHASE IN FLORIDA FROM 19 TO 21 YEARS OF AGE.

Public Relations Program on Available Services for the Elderly — The Board received a report from the Council expressing the need for a comprehensive public relations program on services available to the elderly such as an inventory of available resources for the family of the elderly and their physicians. The Board approved the Council's report and requested that such a program be developed so that it is appropriate for the electronic media as well as presentation to smaller groups.

Physician Reimbursement — The Board supported the need for an increase in physician reimbursement under the Medicaid program to the 75th percentile in order to assure continued physician involvement.

Funds for Alcohol and Drug Abuse Services — The Board expressed support of the Department of Health and Rehabilitative Services in its efforts to restore cutbacks in federal block grants for alcohol and drug abuse services with state funds. Also, the Board supported continuation of alcohol and drug abuse treatment centers in the state of Florida.

Insect Sting Emergency Treatment — The Board recommended to the Department of Education and the Department of Health and Rehabilitative Services that both Departments endorse the AMA Model Insect Emergency Act and that trained school personnel be allowed to administer injections of epinephrine when indicated.

Urinary Catheterization — The Board received a report from the Council which suggested a position on urinary catheterization that should be of help to school personnel.

RECOMMENDATION NO. B-4

THAT THE HOUSE OF DELEGATES SUPPORT THE POSITION THAT URINARY CATHETERIZATION SHOULD BE CONSIDERED A RELATED, NOT MEDICAL, SERVICE AS PROVIDED FOR IN PL 94-142, THE EDUCATION FOR ALL HANDICAPPED CHILDREN ACT OF 1975.

Administration of Medication by School Personnel — The Board received a report from the Council recommending a position on the administration of medication by school personnel.

RECOMMENDATION NO. B-5

THAT THE HOUSE OF DELEGATES SUPPORT THE POSITION THAT IT IS APPROPRIATE FOR SCHOOL NURSES OR TEACHERS TO ADMINISTER MEDICATIONS TO STUDENTS WHEN SUCH MEDICATION AND PROCEDURES HAVE BEEN PRESCRIBED BY A PHYSICIAN TO INCLUDE A WELL ESTABLISHED PROTOCOL AND THE PARENT UNDERSTANDS THE REASON FOR AND THE AFFECTS OF THE MEDICATION.

Public Health Resource Center — The Board supported the establishment of a centralized resource for public health materials by the state of Florida which would serve as a cost effective source of information and data for the state.

Local Impact Funding — The Board supported the need for state and local impact funding for public health.

EMS Project Commendations — The Board extended commendations to Roy M. Baker, M.D.; Raymond H. Alexander, M.D.; Peter T. Pons, M.D., and the members of the Committee on Emergency Medical Services for their extensive efforts and contributions in carrying out the FMF/EMS Project.

Head Injury Seminar — The Board approved FMA co-sponsorship along with the Rehabilitation Institute of West Florida, The National Head Injury Foundation and the Department of Health and Rehabilitative Services for the head injury seminar to be held in Florida in 1983.

FMA Medical Services Program — The Board noted the tremendous work of the Council this year with special emphasis placed on emergency medical services, school health, public health and health care for the aged; all of which are major priorities of the Association. In addition, the Council continued to work closely through its committees with the Department of Health and Rehabilitative Services.

Report of the Council on Medical Services

The Council on Medical Services met in Jacksonville on September 23, 1982 and again on February 24, 1983. Five component committees deal with issues which impact on virtually all citizens of Florida. Included below is a summary of the year's activities from the Committees on Aging, Substance Abuse, School Health, Public Health, Emergency Medical Services and Allied Health Professions.

Committee on Aging

The Committee on Aging chaired by Donald G. Nikolaus, M.D., held two meetings and considered a wide range of matters relating to services and health care costs to the elderly population of Florida. A major goal of the Committee has been to explore avenues for informing the elderly, their families and their physicians about available services in their communities.

The Committee also reviewed programs within the state medical schools which provide training in geriatric care. Particular concern of the Committee has related to the costs of Medicare and Medicaid programs.

Committee on Substance Abuse

The Committee on Substance Abuse chaired by Robert P. Johnson, M.D., held two meetings and made recommendations relative to state programs for the treatment of alcohol and drug abuse, schedule II prescription drugs, and legislation to raise the legal drinking age.

A major project has been undertaken to write articles for a symposium issue of *The Journal of the Florida Medical Association, Inc.*, to be published in October 1983.

Committee on School Health

The Committee on School Health chaired by Kay K. Hanley, M.D., serves as an advisory committee to the Department of Education and Health Program Office, Department of Health and Rehabilitative Services. The Committee met twice and made recommendations concerning health education in high school, school physical exams and pre-athletic participation exams, administration of medication by school personnel, urinary catheterization of handicapped students, and school bus driver hearing exams.

Additionally, the Committee played an important role in the success of the Annual Conference on School Health held in November in Sarasota.

Committee on Public Health

The Committee on Public Health chaired by William F. Hill Jr., M.D., met three times and considered such issues as public health education, a public health resource center, maternal and child health care, and funding problems of public health departments.

Additional recommendations were made concerning professional liability protection and air pollution control. In December, the issue of *The Journal of the Florida Medical Association, Inc.*, carried an article on a diabetes mortality study which was endorsed by the Committee earlier in the year.

Committee on Emergency Medical Services

The Committee on Emergency Medical Services is chaired by Arthur L. Trask, M.D. The Committee was active throughout the year serving in its role as steering committee for the Florida Medical Foundation Emergency Medical Services Project. On completion of the Project a comprehensive report has been made including an Executive Summary, Project Report, and Resource and Data Appendices.

While the EMS Project was the focal point of the Committee's work during the year, other issues were examined including the verification of trauma centers.

Allied Health Professions and Voluntary Health Agencies

Liaison with Allied Health Professions and Voluntary Health Agencies is coordinated by William W. Thompson, M.D. A meeting of Allied Health Professions representatives was held in October in Tallahassee. Representatives of 10 organizations attended. Proposed legislation was the major topic of concern.

A meeting with Voluntary Health Agencies is being planned at the earliest possible date when schedules can be coordinated. The Florida Medical Association's liaison program with the Allied Health Professions and Voluntary Health Agencies continues to be an effective communication source.

The Report of the Council on Medical Services was adopted.

Florida Medical Foundation
Emergency Medical Services Project

The item in the Florida Medical Foundation Report on Emergency Medical Services was adopted. (See Florida Medical Foundation Report, page 539.)

RESOLUTION 83-9
Statewide Program for Medical Certification of High School Athletes

Lee County Medical Society

The Reference Committee moved an amendment to Resolution 83-9.

The amendment carried and Resolution 83-9 was adopted as amended.

RESOLUTION 83-9
Statewide Program for Medical Certification of High School Athletes

RESOLVED, That the FMA encourage the implementation of a statewide program for medical certification of high school athletes based on these minimal standards:

A. Every athlete in the state of Florida shall have a comprehensive screening examination under the supervision of Doctors of Medicine or Doctors of Osteopathy upon entry into the sports program at the high school level. Subsequent annual exams will be performed as indicated.
B. A health history questionnaire shall be completed before the screening exam is done and this shall be updated yearly (interim health history).
C. Prior to participation in each subsequent year, a parent or guardian of the athlete must sign a statement declaring that they consider him/her physically capable of participating in interscholastic sports.
D. The principal or his designee shall keep a record of any illness or injury that caused an athlete to miss a practice or a game during the season.
E. At the beginning of each season, the interim health history forms and injury or illness reports will be reviewed by the school nurse or the appropriate health personnel, and any significant problems uncovered will be referred to the appropriate Doctors of Medicine or Doctors of Osteopathy for certification.
F. If there are no positive interim health findings, then all interim health history forms will be reviewed by a responsible person as determined by the local School Board requirements for final approval or disapproval to participate.
G. To assure continuity throughout the state school system, an acceptable standardized form should be developed.

The motion of the Reference Committee that the Report of Reference Committee No. II be adopted as amended carried.

The Chairman expressed his appreciation to all of the members of the Association who appeared at the meeting to provide guidance and counsel. Special thanks were conveyed to Dr. Samuel M. Day and Dr. Vincent P. Corso, who represented the AMA Delegates, and to Dr. Charles Price, Alternate member of the Reference Committee. The Chairman expressed his sincere appreciation to the members of the Committee, Dr. James T. Cook, III; Dr. Louis R. Guerrero; Dr. Joseph Harris; and Dr. Stanley Goodman. Dr. Jones also thanked Mr. Robert J. Harvey and Miss Dawn Bouchard for their assistance in the preparation of the report.

The motion of the Reference Committee that the Report of Reference Committee No. II be adopted as amended carried.



Dr. and Mrs. William H. Matthews of Jacksonville are regulars at the FMA Annual Meeting. Mrs. Matthews is a Past President of the Auxiliary.

Report of Reference Committee No. III Finance and Administration

Dr. Perry called the Chairman and members of Reference Committee No. III, Finance and Administration, to present their report.

Dr. David R. Arrowsmith, Chairman, and his Committee came forward to present the report of Reference Committee No. III, Finance and Administration.

Remarks of the Speaker of the House

Dr. Arrowsmith expressed his Committee's wishes that Dr. Perry be commended for the clear and precise rules under which the House of Delegates acts and for Dr. Perry's summary given at the beginning of the meeting.

The Remarks of the Speaker presented at the First House of Delegates were filed. (See page 491, First House of Delegates.)

President's Address

Dr. Arrowsmith expressed his Committee's wishes to commend Dr. Windom for his outstanding leadership on behalf of the members of the Association for the past year.

The President's Address presented at the First Meeting of the House was filed. (See "President's Address," page 485.)

Report C of the Board of Governors

Robert E. Windom, M.D., Chairman

The Reference Committee commended the Board for its outstanding performance during the year and suggested particular action on the recommendations as follows:

A motion of the Reference Committee was carried to amend the narrative in Report C on the sixth line of paragraph three by deleting the words "have and."

A motion of the Reference Committee was carried to amend Recommendation C-1 by adding the word "A" at the beginning of the sentence and changing the word "Delegates" to read "Delegate."

Upon review of the Board's report on Finances, the Committee was presented, for its review, with CPA audits prepared by the Association's CPA firm, Harbeson, Beckerleg and Fletcher, for the year ending December 31, 1982 and found the audit report to be acceptable.

A motion of the Reference Committee was carried to amend the section under the heading "Membership" on the third line of paragraph six by changing the words "carefully evaluate" to read "evaluate carefully".

The Reference Committee considered the portion of Report F, which is a Supplement to Report C, as it pertained to the correction of Recommendation C-2 to include language that was inadvertently omitted in the Recommendation as previously included in the Delegates' Handbook.

Report C of the Board of Governors was adopted as amended.

Report C of the Board of Governors

Robert E. Windom, M.D., Chairman

On behalf of the Board of Governors, your Chairman is both proud and pleased to submit this report to the House of Delegates regarding the many activities of the Board of Governors and the Association's Councils and Committees during the past Association year.

Your Board and the many physicians who have given so much of their time and talents to the Florida Medical Association have done so to assure that the highest level of quality medical care remains available to our fellow Florida citizens and visitors. It is the quality of medical care that can only be preserved and delivered through our free enterprise system.

This report touches the many issues that physicians face both individually and collectively and how your colleagues working through organized medicine at the national, state and local levels are attempting to do something about the complex and critical issues of our time. Special attention is called to the considerable amount of time and resources and continue to go towards eliminating the "professional liability virus" that plagues our profession and our patients.

Your Chairman has been honored for having had the opportunity of working with the many dedicated physicians who have actively served in a leadership capacity during the past year. I would particularly like to thank those physicians whose individual special talents came together on behalf of the Association in the Board of Governors. Each of your Board members have had your interest uppermost in their mind.

J. Lee Dockery, M.D., President-Elect
James F. Richards Jr., M.D., Vice President
Luis M. Perez, M.D., Secretary
Yank D. Coble Jr., M.D., Treasurer
Sanford A. Mullen, M.D., Immediate Past President — 1984
T. Byron Thames, M.D., Past President — 1983
Joseph T. Ostroski, M.D., At Large — 1983
Gerold L. Schiebler, M.D., District A — 1986



David R. Arrowsmith, M.D., of Fort Walton Beach, presided over Reference Committee III, which studied business related to Finance and Administration. Left to right: Daniel L. Seckinger, M.D., Miami; Virgil A. Ponzoli Jr., M.D., Naples; Ms. Lori Moore, Jacksonville, Recorder; Dr. Arrowsmith; V.A. Marks, M.D., Palm Beach Gardens; Donald L. Ames, M.D., Vero Beach; and T. Byron Thames, M.D., Orlando.

Thomas E. McKell, M.D., District B — 1983
Dick L. Van Eldik, M.D., District C — 1985
Norman M. Kenyon, M.D., District D — 1984
James B. Perry, M.D., Speaker of the House
Charles K. Donegan, M.D., AMA Delegate — 1983
Eugene G. Peek Jr., M.D., HRS — 1983
Vernon B. Astler, M.D., FPIR — 1983
Robert N. Webster, M.D., SBME — 1983
Mr. D. Scott Featherman, Student Member — 1982

To my successor, Dr. J. Lee Dockery, I extend my best wishes and my optimistic belief that his year as President will be a deeply rewarding experience as mine has been. With the level of leadership in Florida medicine and the many dedicated physicians who give of their time and talents in behalf of their colleagues, he can only succeed.

Major Activities

1983 Annual Meeting — The Board approved the format for the 1983 Annual Meeting with "Health Care Team: Interact '83" as the scientific theme.

FMA Leadership Conference — "What's FMA Done For You Lately?" was the theme for the 1983 Leadership Conference at Lake Buena Vista with local and nationally known speakers taking part. Professional liability, competition and regulation, medical economics, the political process and the use of communications in order to meet the FMA goals for professional liability reform were discussed. Over 200 people, including 177 members of the Florida Medical Association, took part during the program held on Saturday and Sunday, January 29-30. This represented 32 county medical societies or 98% of the FMA membership. President Robert E. Windom, M.D., and President-Elect J. Lee Dockery, M.D., presided at the Conference. Speakers included: Frank J. Jirka Jr., M.D., President-Elect of the American Medical Association; Walter McClure, Ph.D., President of the Center for Policy Studies; Mr. Roy Pfautch, President of Civic Service, Inc.; T. Byron Thames, M.D., Chairman of the FMA Committee on Professional Liability; Vernon B. Astler, M.D., Chairman, FPIR; Charles P. Hayes Jr., M.D., Chairman of the Council on Medical Economics; W. Harold Parham, D.H.A., Executive Vice President, FMA; James F. Richards Jr., M.D., Vice President, FMA; Dick L. Van Eldik, M.D., member, Florida Task Force on Competition and Consumer Choice in Health Care; Richard S. Hodes, M.D., Chairman of the FMA Committee on Government Relations; Rufus K. Broadaway, M.D., AMA Trustee; William G. Myers, M.D., Florida Senator; Louis C. Murray, M.D., Chairman of the FMA Council on Legislation; Frank C. Coleman, M.D., President, FLAMPAC and FMA Legislative Consultant Senator Mallory Horne.

The Conference provided county medical society leaders and others with an in-depth and timely look at the professional liability crisis and other important issues of concern to medicine.

The Florida Physicians' Insurance Reciprocal — The Chairman of the Board and the Attorney-in-Fact/President of the Florida Physicians' Insurance Reciprocal presented to the Board of Governors a current status report and the year-end (1982) financial statements. The Board noted the adverse trend and the loss of over 4½ million dollars by the Reciprocal due primarily to the frequency of large claims and the payment of retro reinsurance. A detailed report on the FPIR is included in the delegate's notebook.

1982 House of Delegates Referrals

The Board reviewed the proceedings of the House of Delegates and items requiring additional study and/or action were referred to the appropriate councils and committees. Some matters required Board action only. Individual actions regarding the policies of the House of Delegates appear in the various council and committee reports as well as in this and other reports of the Board of Governors in the *Delegates Handbook*.

Resolution 81-11 — Seating of Delegates — Resolution 81-11 was presented by Hillsborough County Medical Association, adopted by the House of Delegates and referred to the Board of Governors for an appropriate amendment to the FMA Bylaws. The Board presented Recommendation No. C-2 which was not adopted by the House but referred back to the Board of Governors. As a result, the Board would like to make the following recommendation.

RECOMMENDATION NO. C-1

THAT THE HOUSE OF DELEGATES ADOPT THE FOLLOWING AMENDMENT TO THE FMA BYLAWS WHICH PROVIDES FOR THE SEATING OF ALTERNATE DELEGATES DURING SESSIONS OF THE HOUSE OF DELEGATES:

CHAPTER IV — HOUSE OF DELEGATES

Section 11. **Tenure of Delegates**

~~A delegate who has been officially seated at a meeting of the House of Delegates shall remain a delegate of the component society which he represents throughout all sessions of that meeting, and his place shall not be taken by any other delegate or alternate.~~

Each delegate seated at an Annual Meeting shall serve until the next Annual Meeting and shall serve at all interim or called meetings between Annual Meetings, unless the component society by certification of its president or secretary duly designates a different delegate.

Section 12. **Alternate Delegates**

Each component society shall select alternate delegates corresponding in number to the delegates to which it is entitled, and shall designate to the secretary of the Association the order in which they are to serve.

Each alternate not seated as a delegate at the Annual Meeting shall continue to serve as an alternate until the next Annual Meeting and for all interim or called meetings between Annual Meetings, unless the component society by certification of its president or secretary duly designate a different alternate.

A QUALIFIED ALTERNATE DELEGATE MAY BE SEATED FOR A DELEGATE WHO IS UNABLE TO ATTEND THE AN NUAL MEETING OR ANY SESSION OF THE HOUSE OF DELEGATES. THE COMPONENT SOCIETY MAY SEAT AN ALTERNATE DELEGATE FOR THE DELEGATE PROVIDED THAT THE ALTERNATE DELEGATE DEPOSITS WITH THE CREDENTIALS COMMITTEE A CERTIFICATE SIGNED BY THE PRESIDENT OR SECRETARY OF THE COMPONENT SOCIETY STATING THAT THE ALTERNATE HAS BEEN PROPERLY SELECTED TO SERVE. AN ALTERNATE WHO HAS BEEN SEATED AT ANY SINGLE SESSION OF THE HOUSE OF DELEGATES SHALL SERVE THROUGHOUT THAT SESSION AND MAY NOT HAVE HIS PLACE TAKEN BY ANY OTHER DELEGATE OR ALTERNATE PROVIDED FURTHER, THAT ONCE AN ALTERNATE HAS BEEN SEATED FOR A DELEGATE DURING ANY SESSION OF THE HOUSE OF DELEGATES, THAT ALTERNATE SHALL BE THE ONLY ALTERNATE THEREAFTER ELIGIBLE TO SERVE FOR THAT PARTICULAR DELEGATE AT SUBSEQUENT SESSIONS OF THE HOUSE OF DELEGATES DURING THE ANNUAL MEETING.

~~deleted language~~
NEW LANGUAGE

Resolution 82-1 — Annual Meeting Site — This resolution from Lee County was not adopted but referred to the Board of Governors for further consideration.

RESOLUTION 82-1

RESOLVED, That the 1983 Annual Meeting of the FMA be held in the Orlando area.

The Board of Governors reviewed the request to hold the 1983 Annual Meeting in the Orlando area, but because of unavailability of adequate facilities in the central Florida area to meet the needs of the FMA at the current time, the Board was unable to meet this request. However, the Board has approved the finalization of contractual arrangements for the 1984 Annual Meeting to be held at the Palace Hotel currently under construction in Lake Buena Vista, Florida, May 2-6, 1984, with the understanding that the costs of holding the meeting will be higher than costs incurred for meetings held in the South Florida area.

Medical Student Loans — The House of Delegates requested that the Florida Medical Foundation investigate the feasibility of increased funding for medical student loans. This was referred to the Foundation and the findings are included in the Annual Report of the Florida Medical Foundation in the *Delegates Handbook*.

Professional Liability

RESOLUTION 82-5
Professional Liability
Palm Beach County Medical Society

RESOLUTION 82-9
Limit on Professional Liability Judgments
Dade County Medical Association

RESOLUTION 82-22
PLI Reforms Legislation
Broward County Medical Association

RESOLUTION 82-23
Professional Liability Insurance
Broward County Medical Association

RESOLUTION 82-25
FMA Legislative Priorities
Dade County Medical Association

These resolutions were referred to the Board of Governors in order that the principles contained in each of the resolutions might be implemented when appropriate and practical as part of the overall professional liability program of the Association. An in-depth report on the development and implementation of the broad-based program to resolve the professional liability problem is included in the Board of Governors Report to the House of Delegates as well as the Annual Report of the Special Committee on Professional Liability.

Resolution 82-24 — Professional Liability Support Fund — This resolution introduced by the Dade County Medical Association was considered by the House. A substitute resolution was adopted.

RESOLVED, That each active member of the Florida Medical Association be obligated, if necessary as determined by the Board of Governors, to pay an assessment of $50 in addition to any and all required dues payment; and be it further

RESOLVED, That each physician member of the Florida Medical Association be encouraged to donate $50 to the Florida Medical Political Action Committee as soon as possible.

The Board of Governors at its meeting on August 8, 1982 determined that all FMA regular active dues paying members who held that category of membership as of August 8, 1982 be obligated to pay an assessment of $50 in addition to any and all required dues for 1982 to be utilized for the Association's Professional Liability Support Fund as authorized by the House of Delegates. As of the date of this report, 7,000 FMA members have paid the assessment and 4,500 members have not as yet paid.

Finance — The Association had an income during 1982 from all sources of $3,477,640 and total expenditures during the year of $2,971,259, for a gross gain of $506,381. The figures do not reflect expenditures for equipment or depreciable items as they are a transfer from liquid to fixed assets. The net worth of the Association as of December 31, 1982 was $3,438,067.

In 1976, the FMA implemented a special assessment to be restricted for the purpose of public relations and legislative activities. Interest of $22,545 was earned on these funds in 1982 and there were no expenditures. The balance of the special assessment funds as of December 31, 1982 was $219,438.

The House of Delegates in 1982 authorized, at the discretion of the Board, a $50.00 mandatory assessment of all FMA active members for professional liability. The Board, at its meeting on August 8, determined the assessment was needed to carry out the Association's PLI program. As of the date of this report, total funds collected have been $354,900 with interest earned of $12,157.69. Total expenditures to date are $131,711.85 and the balance in the fund is $235,345.84.

The House of Delegates in 1980 authorized the Board of Governors to establish a special trust fund for the current and future reserves of the Association, the initial funding coming from the approximately $600,000 profit from the sale of the headquarters building in Jacksonville. The Trustees of this fund are the three (3) immediate past living presidents of the Association, including the immediate past president who is an officer. The principal and interest of these funds accrue in this trust account which shall be established in the name of the Association in an escrow trust. The Trustees may release the funds upon request of the Board of Governors which indicates that an emergency exists which cannot be financed through regular income or assets of the Association. In the event the Trustees do not agree to release the funds, the Board of Governors may direct their release upon ¾ vote of the active members of the Board of Governors.

The net proceeds from the sale of the FMA property at 801 Riverside Avenue and the purchase of 760 Riverside Avenue left a net of $137,000 and, as directed by the Board, was placed in the reserve fund.

The first two annual principal payments on the mortgage held by the FMA on the 801 property of $128,946.66 were placed in this trust fund. The interest earned through December 31, 1982 in the fund was $52,186.00 and the total balance in the trust fund as of December 31, 1982 was $318,132.66.

The Board reviewed the financial statements and proposed 1983 budget presented by the Treasurer, Executive Vice President and Executive Director. The Board approved the proposed budget for 1983 for the total anticipated income from all sources and expenditures in the amount of $3,197,200. In keeping with the policy established by the House of Delegates, $50.00 of each member's dues was budgeted to public relations and legislative activities.

The audit conducted by the Association's CPA firm of Harbeson, Beckerleg and Fletcher for the year ending December 31, 1982, is available for inspection by any member of the Association who may wish to review it.

Management — The Board approved the report of the Committee on Management and directed that the report be included in the delegates notebook.

Board Actions of Major Importance

FMA Priorities 1982-83 — The Board adopted the following Association priorities for 1982-83 and directed that the Association's staff and resources be utilized to carry out these priorities:

Membership

- That the severe problem of professional liability and cost of health care liability insurance in Florida be given the Association's highest immediate priority and that every possible avenue of support for effective and permanent solutions to the problem be cooperatively implemented by the medical profession, the public, the Florida Legislature and the judiciary.
- Continued efforts to encourage FMA members to acknowledge their individual responsibilities for becoming actively involved in organized medicine, including legislation and political action activities, and in community affairs.
- Continued efforts to enhance communication and cooperation relating to programs and activities of the FMA with the membership directly and through respective county medical and FMA recognized specialty societies.
- Membership development at the county, state and national levels to include medical student and house staff representatives.
- Study the current relationships of physicians, individually and collectively, with hospitals and other health care facilities.
- Continued efforts toward full implementation of a statewide impaired physicians program.
- Seek a cooperative working relationship with FMA recognized specialty societies to assure the expedient completion and promotion of all scientific programs to be held in conjuction with the 1983 Annual Meeting of the Florida Medical Association.

Public

- Provide the public, governmental bodies and the news media with timely and responsive Association views on:

 1. The seriousness of the problem of professional liability and cost of health care liability insurance in Florida and how it affects all segments of society — medically, surgically, emotionally and financially.
 2. Standards of health care including health planning and qualified review of the quality and appropriateness of health care delivery.
 3. Health care delivery mechanisms.
 4. The role of government in health care delivery.
 5. Preventive health care education programs.
 6. Emergency medical services.

- Continue support for health care cost awareness and containment through:

 1. Joint programs with business and industry to provide cost-efficient health care within the existing private health care delivery system.
 2. Actively advocate physician participation in health care cost coalitions with business and industry.
 3. Continued support for the cost containment movement through:
 a. Participation in the AMA's Federation Cost Effectiveness Communications Network, and
 b. Encouragement and support of public education programs on health care cost awareness.

Programs

- Medical professional liability. A massive education program directed at the public, the legislature and the judiciary with facts regarding the need for resolving the medical professional liability problem in Florida, with consideration to the following:

 1. Abuses in Florida
 - Current contingency fee system
 - Bad faith demands
 - Punitive damages
 - Summary judgments

 2. Place a limit on general damages, pain and suffering
 - Structured settlements
 - Remittitur-additur

 3. All other remedial action necessary
 - Continue ongoing evaluation of the FMA Council and Committee structure scope of activities to best serve the interest of the membership.
 - Continue the program of corporate visitations and the development of business-health coalitions, and to foster understanding of medical issues that affect all segments of society.
 - Continuation of FMA medical services programs with emphasis on substance abuse, emergency medical services, school health and public health.
 - Continue a close working relationship with the Department of Health and Rehabilitative Services.
 - Continued emphasis on local support for legislative activities and development of active political education programs in cooperation with the FMA Auxiliary in each community.
 - Continued support of the FMA Auxiliary's educational programs and activities, including the Auxiliary's activities at the national level.
 - Educational programs and activities on health care for the aging.
 - Continued emphasis on a statewide PMUR program, conducted by the private sector, as a viable alternative to a federal government-controlled program whose emphasis is solely on cost without regard to quality.
 - Seek direct physician participation at the policymaking level for health planning and other state administered health care programs including the rulemaking process.

American Medical Association (AMA)

- Continue efforts for AMA membership development.
- Cooperative effort to coordinate programs and activities at all levels of the Federation.

Issues

- Medical professional liability.
- Cost of medical care.
- Continued monitoring of the effectiveness of the Department of HRS as it pertains to the public's health and continued strong support for ensuring effective medical physicians' leadership at all levels of the Department.
- Support enactment of national legislation to accomplish changes in the future direction of federal government programs including:

 1. Repeal of P.L. 93-641 and the elimination of HSAs with future appropriate health planning activities to be carried out by state and local government.
 2. The elimination of professional standards review organizations with support for peer medical utilization review (PRO) to be carried out at the local level within the private sector.
 3. The elimination of federal subsidies for the unfair promotion of HMOs as a more economical alternative to other private health care delivery mechanisms.
 4. Support legislation proposed by the American Medical Association to curb the authority of the Federal Trade Commission to regulate the profession of medicine.

- Opposition to any compulsory comprehensive national health insurance program.
- Opposition to encroachment of the practice of medicine by non-M.D. health care providers.

Professional Liability Insurance — The Board has given the highest immediate priority to the severe problem of professional liability. The following is a summary of the actions that have taken place regarding this important Association effort.

The Board of Governors, at its meeting on August 8, 1982, adopted broad-based proposals including legislative, judicial and constitutional provisions to help resolve the professional liability crisis in Florida on a long-term basis. The program entitled "Reason '83" will receive the Association's high priority. A summary of the FMA's proposals is included in the report of the Committee on Professional Liability presented in the delegates notebook. The Association's position regarding the public, the Florida legislature and the judiciary was dramatically captured in the audiovisual production entitled "With Reason and Justice" that was produced in video tape and a slide presentation. The presentation has been distributed to every major hospital in the state, presented to the majority of our component county medical societies and specialty groups and given to numerous civic and business clubs.

The Association with the assistance of our public relations and legislative consultants has made every effort to effectively present our important story to the media, the legislature and the public. Our consultants have been most helpful in developing and implementing various aspects of our professional liability program. Anticipating our need for involvement with the policy makers of the various daily and weekly newspapers around the state, we have added a former political editor of one of Florida's major daily newspapers to our consulting staff. This has enabled the Association to develop meaningful information that can be more readily used by the media. Also, meetings with the editorial boards have been well received. Representatives of the FMA along with leaders of component medical societies have met with the sixteen major newspapers' editorial boards located throughout Florida.

The Board through the officers of the Association, members of the Committee on Professional Liability, appropriate consultants and staff have traveled and spoken extensively before county medical societies, civic and business clubs, and other groups about our program. **Special attention is called to the efforts of the Chairman of the Committee on Professional Liability, Dr. T. Byron Thames who has given so very much of his time and talents in our behalf.** In addition to providing speakers, we have had our spokesmen involved in debates before "Tiger Bay" and similar organizations as well as on television and radio. Special commendations are extended to Dr. Edward Annis, Chairman, FMA Speakers Bureau, for his contributions. Our key contact physicians have worked with their assigned legislators to assure that our positions are understood. The Auxiliary has spent much time putting into place a Legislative Alert system and our representatives have met with allied health groups, business groups and other interested parties as a means of enlisting their support of our program.



AMA President William Y. Rial, M.D., and U.S. Senator Richard G. Lugar of Indiana were guest speakers at the Annual Meeting: (left to right) Dr. Boyle; Dr. Tom Berglund; Dr. Rial; Sen. Lugar; and FMA President Robert E. Windom, M.D.

The Association's membership has been kept informed of the PLI program through *The Journal of the Florida Medical Association, Inc.*, the FMA *Briefs*, *President's Memo*, the FMA *Graypaper* and special mailings. There have been formal news releases, numerous feature stories in magazines and newspapers, and a vitally important project to provide PLI information pamphlets for both physicians and their patients. The March issue of *The FMA Journal* contained a comprehensive report on the scope of the professional liability problems and a detailed explanation of the FMA's legislative proposals. All of these activities have been reenforced by the activities of many of our members who have taken the time to explain our program to interested individuals in their local community.

The Board authorized a formal complaint to be filed with the Judicial Qualification Commission against the Broward County judge who awarded the plaintiff's attorney a $4.4 million fee in a medical malpractice case as being totally unreasonable, unconscionable and an irresponsible act by an officer of the court. The Commission refused to hear the complaint citing lack of jurisdiction. The Board also authorized the FMA to seek legislation to allow insurance companies to advise plaintiffs directly regarding settlement offers and that this be included as part of the FMA's professional liability legislative proposals for 1983.

At the request of the Dade County Medical Association and Broward County Medical Association, the Board approved a petition to the Governor to add a moratorium on assessment of physician premiums for 1982-83 to the Patient's Compensation Fund to the agenda for the Special Session of the Florida Legislature held in June 1982. As a result of the special session, legislation was enacted that provided the following:

- Members of the Patient's Compensation Fund can purchase reinsurance for potential assessments through the Florida Medical Malpractice Joint Underwriting Association (JUA) as a premium not to exceed ⅓ of their Patient's Compensation Fund premium.
- Variable limits of liability will be available through the Patient's Compensation Fund in amounts of $1, 2, 3, 5, 8 and 10 million.
- The unlimited liability feature of the Patient's Compensation Fund has been removed.
- The entire provision will sunset and be reviewed during the 1983 legislative session.

Membership — There have been continued efforts to encourage FMA members to acknowledge their individual responsibilities for becoming actively involved in organized medicine at the national, state and local levels. FMA President Robert E. Windom, M.D., has stressed the importance of being actively involved in organized medicine, including legislation, political action activities and community affairs in his President's Page in *The Journal*. A special brochure explaining what organized medicine in Florida does for its members was developed and widely distributed.

President Windom conducted a very active visitation program visiting a majority of county medical societies, specialty groups and other allied organizations.

There has been an active communications program, both written and verbal, directed at the membership and public-at-large addressing the professional liability crisis. Also, a special slide presentation, "With Reason and Justice", was developed and shown to a majority of county medical societies, specialty groups and some civic organizations spelling out the FMA proposals for resolving the PLI problem. This presentation was very well received and has done much to stimulate action on the part of the FMA membership and our friends.

The *Briefs* and *Graypaper* have been published on a regular basis in order to keep our members apprised of situations and items of interest to medicine. Special mailings were sent out by the FMA Secretary, Luis M. Perez, M.D., to the officers and executives of county medical societies with information on health planning, peer review, specific actions of the Board and copies of presentations made to various governmental bodies on behalf of the Association. After each meeting of the Board, a summary was developed and printed in *The Journal* of the major actions of interest taken by the Board of Governors.

The Committee on Membership Development has undertaken a program to develop membership at all levels. Special attention was given to increasing AMA membership, the result being an increase in the number of Florida AMA Delegates to 11. Also, the Committee has developed membership brochures which have been widely distributed to medical students, residents and prospective members. Additional information regarding the Committee on Membership may be found in the *Delegates Handbook*.

The development of rules to implement the Tax Equity and Fiscal Responsibility Act (TEFRA) has caused the Board and Council on Medical Economics to evaluate carefully the current and future relationships that physicians individually and collec

tively, will have with hospitals and other health care facilities. A cooperative relationship continues to exist between the FMA and the Florida Hospital Association and Florida League of Hospitals. Several meetings were held with their representatives during the year resulting in close cooperation on our PLI efforts and other legislative issues. Talks will continue over the ever changing federal and state policies that will change the way in which physicians and hospitals relate.

The Board was pleased with the continued refinement of the Impaired Physicians Program. The Association is still working with the State Board of Medical Examiners in hopes of soon developing an even more comprehensive program.

The Board authorized development of an interprofessional impaired professional program in cooperation with the Florida Osteopathic Medical Association, The Florida Veterinary Medical Association and the Florida Dental Association under the auspices of the FMA and FMF. In other action, the Board expressed sincerest commendations to Dolores A. Morgan, M.D., for her outstanding contributions to the Impaired Physicians Program in serving as Medical Director of the Program.

The Councils and Committees have concentrated their efforts towards meeting the 1982-83 FMA Priorities. Before each meeting of the Board, a progress status report was prepared so that each Board member and council chairman could determine how the Association's activities were meeting the established priorities.

The Board was pleased with the result of the Florida Medical Foundation Emergency Medical Services Project and the positive effect this may have on the future of quality emergency medical services in Florida. **The Board wishes to commend Dr. Raymond H. Alexander, who served as Medical Director of the Project and Dr. Peter T. Pons, Assistant Medical Director, for their exemplary work on this Project.**

FMA representatives met with DHRS Secretary David Pingree and members of his staff during the year in order to maintain a continued cooperative working relationship.

Many officers and members of the Association appeared before legislative committees during the regular and special sessions of the 1982 Florida Legislature. Their appearance covered a wide range of topics including PLI, health care delivery mechanisms, preventive health care, emergency medical services, cost containment, health planning, child safety and staff privileges.

The approach to proving the public, governmental bodies and the news media with timely information has been broad based. There has been wide distribution to Florida newspapers of *Medical Message* articles covering a wide range of subjects. In the electronic media, there were several radio taped *Medical Message* programs released to radio stations throughout the state of Florida that provided information to the public on various topics of health information.

American Medical Association (AMA) — The Florida Delegation to the AMA provided effective input into the development of a national health policy agenda. The delegation participated in the Southeastern Delegation which is comprised of the ten southeastern states that provide a forum for addressing issues of mutual concern. The Board was pleased with the election of Rufus K. Broadaway, M.D., of Miami to the AMA Board of Trustees at the AMA Annual Meeting in June. The Florida Delegation continued to support the efforts of the AMA in repealing PL-93-641, the elimination of federal subsidies for the promotion of HMOs and curbing the authority of the FTC.

The Board received from the Florida AMA Delegation a report that the alternate delegates play an integral role in the delegation's activities at the AMA meetings including attendance and reporting on reference committee meetings, as well as frequently replacing the delegates as seated members of the House and, therefore should have a vote in electing the chairman and vice chairman of the delegation.

RECOMMENDATION NO. C-2

THAT THE HOUSE OF DELEGATES ADOPT THE FOLLOWING AMENDMENT TO THE FMA BYLAWS WHICH PROVIDES FOR THE ELECTION OF THE CHAIRMAN AND VICE CHAIRMAN OF THE FLORIDA DELEGATES TO THE HOUSE OF DELEGATES OF THE AMERICAN MEDICAL ASSOCIATION:

CHAPTER IV — HOUSE OF DELEGATES

Section 7. **Delegates to the House of Delegates of American Medical Association**

The House of Delegates shall elect from the active members of the Association representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body in such manner that all delegates are not selected in any one year. Each delegate shall be elected for a two year term.

There shall also be elected one alternate delegate for each delegate, whose term shall coincide with that of the delegate for whom he is the alternate.

~~Immediately following the Florida Medical Association's Annual Meeting, the American Medical Association delegates shall meet and select a chairman for the coming year, among whose responsibilities shall be to have present at each meeting of the Board of Governors a member of the delegation.~~

IMMEDIATELY FOLLOWING THE FLORIDA MEDICAL ASSOCIATION'S ANNUAL MEETING, THE DELEGATES AND ALTERNATE DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION SHALL MEET AND ELECT A CHAIRMAN AND VICE CHAIRMAN FOR THE COMING YEAR, BOTH OF WHOM SHALL BE DELEGATES, AMONG WHOSE RESPONSIBILITIES SHALL BE TO HAVE PRESENT AT EACH MEETING OF THE BOARD OF GOVERNORS A MEMBER OF THE DELEGATION.

~~deleted language~~
NEW LANGUAGE

A more complete report regarding the AMA can be found elsewhere in the *Delegates Handbook*.

FMIT Program — The Board approved amendments to the FMIT program including:

- Received a report on the claims and utilization experience in the FMIT program and authorized a rate increase to be effective June 1, 1983 dividing the state into three territories to insure the continued solvency of the program.

Territory A Dade County	55.2% employee 31.4% dependent coverage
Territory B Broward County	39.0% employee 17.8% dependent coverage
Territory C Remainder of State	39.0% employee 17.8% dependent coverage

- Approved an increase effective June 1, 1983 in the deductible from $100 individual to $200 and $200 family to $400.
- Directed that a rider for nervous disorders and psychiatric benefits be offered at rates indicated necessary to provide this coverage and that the coverage be subject to maintaining a minimum number of subscribers to make it actuarially sound. Benefits under the current program will continue to be:

1. 40 outpatient visits per year paid at 50% with a $25,000 lifetime maximum;
2. $25,000 lifetime maximum for hospitalization with physicians' fees at 80%.

- An amendment to the FMIT Plan Benefits booklet, page 9, regarding pre-existing conditions to provide that new members of the FMA are eligible to enroll themselves, their dependents, and any full-time employees and their dependents under the Plan. The limitation of pre-existing conditions shall apply to members and their dependents and employers and their dependents.
- Approved an amendment to the FMIT Plan Benefits booklet to be effective November 1, 1982 regarding pre-existing conditions to provide that:

 "A pre-existing condition is any condition that exists prior to the effective date of coverage for an eligible employee or his dependent".

- Approved a policy that benefits under the FMIT program not be allowed for physicians treating dependent members of their immediate families.
- Approved PIMCO to continue marketing FMA sponsored insurance plans, including the FMIT program.

House of Delegates Ratio — The Board authorized that the current allocation of delegates remain at one delegate for every fifty active members or fraction thereof for the 1983 Annual Meeting.

Florida Medical Association Auxiliary — The Board recognized the important role of the Auxiliary in supporting the activities of the FMA especially as they relate to the overall PLI efforts. The continued growth of the Legislative Alert Program involves many members of the Auxiliary and is a key element in the FMA legislative program.

The Board endorsed the educational activities of the FMA Auxiliary with regard to learning disabilities. The Board expressed the highest commendation to the Auxiliary for their continued help with the legislative program; their assistance in carrying out the FLAMPAC education activities; their continued contributions to the development of the Association's Impaired Physicians Program and their help in raising funds in behalf of the Florida Medical Foundation. Full-time executive and secretarial staff have been assigned to the Auxiliary to assist them in carrying out their activities.

The Board is most grateful to the current president of the Auxiliary, Mrs. Daniel B. Nunn (Gloria) of Jacksonville for a successful and fulfilling year and extends best wishes to Mrs. S. Bruce Gerber (Priscilla) of Winter Haven for an outstanding year as President when she assumes office at the Auxiliary's 1983 Annual Meeting in May.

AMA/GTE Telenet Medical Information Network — The Board authorized the FMA to become the distributor in the state of Florida for the AMA/GTE Telenet Medical Information Network. This service, offered by the AMA and GTE, provides an ever-changing product that will eventually be used by health care providers worldwide.

Through a computer terminal, a physician will be able to obtain state-of-the-art information in their office or home. The network can communicate with the vast majority of available data equipment including a simple word processor. Therefore, for an individual to participate in this system does not necessarily mean a substantial investment in computer hardware. Presently, the network service includes: drug information; disease information; CME bulletin board; AMA meeting bulletin board; MED/MAIL electronic mail; medical procedure coding and nonemclature; socio-economic bibliographic information; and document order service. As a distributorship, FMA's responsibilities will include: market development (Florida); customer service; market feedback (reporting to AMA/GTE problems encountered); and administrator services. The future potential benefits to the Association's membership as a result of the Telenet Network are substantial and far reaching.

Dade County Medical Association Referendum Regarding PSRO — The Board received correspondence from several Dade County physicians regarding the referendum approved by the membership of the DCMA in 1982 that no active member of the DCMA may hold office, chair a committee in the DCMA or be a delegate to the FMA if that member holds office, chairs a committee or serves as a delegate to the American Association of Professional Review Organization. The Board also reviewed an opinion from the FMA Judicial Council that the referendum does not constitute a change in the DCMA Bylaws and therefore the referendum would not require, by its effect, any member of the DCMA to resign from office, and further that since such a referendum is not in fact a bylaws change in the DCMA Bylaws, there could be no conflict at this time with the FMA Bylaws. In light of the Judicial opinion, the Board felt no action by the FMA was indicated at this time.

Appointments

The Board of Governors approved the nomination of Charles K. Donegan, M.D., as the AMA Delegate to serve on the Board of Governors. Dr. Donegan was appointed as the optional member of the Executive Committee.

Appointed as advisory members of the Board of Governors were Vernon B. Astler, M.D., Florida Physicians' Insurance Reciprocal and Public Relations Officer; Eugene G. Peek Jr., M.D., Department of HRS; Robert N. Webster, M.D., State Board of Medical Examiners; and Mr. D. Scott Featherman, Medical Student member.

Gerold L. Schiebler, M.D., was appointed as an Assistant Editor of *The FMA Journal* from the Board of Governors.

Vernon B. Astler, M.D., was appointed as Chairman of the Board of Governors' Committee on Management. T. Byron Thames, M.D., was named Chairman of the Committee on Professional Liability.

Edward R. Annis, M.D., was appointed Chairman of the FMA Speakers Bureau.

Charles K. Donegan, M.D. and Joseph C. Von Thron, M.D., were elected as Chairman and Vice Chairman respectively of Florida's AMA Delegates.

FMA Journal Editor and Editorial Board — The Board approved the President-Elect's nomination of Daniel B. Nunn, M.D., Jacksonville, for reappointment as Editor of *The FMA Journal* for the Association year beginning in May 1983.

The Board approved:

For appointment as Associate Editor:

F. Norman Vickers, M.D., Pensacola

For reappointment as Associate Editor:

Clyde M. Collins, M.D., Jacksonville
E. Charlton Prather, M.D., Tallahassee

For reappointment as Assistant Editor:

Frank C. Coleman, M.D., Tampa
James K. Conn, M.D., Tallahassee
Lee A. Fischer, M.D., West Palm Beach
Henry L. Harrell Jr., M.D., Ocala
Edward Pedrero, M.D., Tampa

FMA Awards

A.H. Robins Award — The Board reviewed nominations received from county medical societies and selected the recipient of the 1983 A.H. Robins Award "For Outstanding Community Service by a Physician". This award will be presented at the First Meeting of the House of Delegates on May 4, 1983. The recipient for this year's award will be included in the delegates notebook.

Distinguished Layman Award — The Board has selected the 1983 recipient of the Distinguished Layman Award. The appropriate citation, along with the criteria, will be included in the delegates notebook.

Excellence in Medical Journalism — The Board approved continuation of the Association's Excellence in Medical Journalism Award for 1882 to recognize outstanding accomplishments by the news media related to medical topics.

Medical Speakers Award — The Board approved the continuation of the FMA sponsored Speakers Award to acknowledge exemplary medical speakers who have distinguished themselves via the electronic media and before live audiences.

Medical Malpractice Prevention Award — The Board approved continuation of the Medical Malpractice Prevention Award to be sponsored by the Florida Physicians' Insurance Reciprocal to recognize physicians and other individuals who have distinguished themselves through activities relating to medical malpractice prevention.

Medical Seminars — The Board approved four medical seminars to be sponsored by the FMA and Auxiliary through INTRAV during 1983. The Jamaican Adventure, January 30-February 6; Australian Adventure, March 5-21; Orient Express Adventure, July 29-August 11; Main River (Rhine) Cruise, July 14-27; and Dutch Waterways Adventure, September 25-October 8.

Nominations

Certificate of Merit — The Board selected an outstanding physician for nomination to the House of Delegates to receive the Certificate of Merit for 1983 (the Association's highest honor of achievement). This nomination will be included in the delegates notebook for approval by the House of Delegates.



FMA Executive Vice President W. Harold Parham, D.H.A. (left) and PIMCO President James W. Walker, M.D., steal a few minutes from convention activities to enjoy some sunshine

Certificate of Appreciation — The Board selected two physicians to be nominated to the House of Delegates as recipients of the 1983 Certificate of Appreciation. These nominations will be included in the delegates notebook for approval by the House of Delegates.

Judicial Council — In compliance with the FMA Bylaws, the Board of Governors has considered nominations for terms expiring on the Judicial Council in 1983. The Board wishes to nominate Robert J. Brennan, M.D., for re-election to the Judicial Council as the representative for Medical District C for a five-year term on the Judicial Council.

Committee on Membership and Discipline — The Board will submit nominations to the House for election to the Committee on Membership and Discipline in a supplemental report.

AMA Awards

The Board submitted for nomination the names of James J. Cerda, M.D., for the 1983 Joseph B. Goldberger Award in Clinical Nutrition and Albert L. Rhoton Jr., M.D., for the 1983 Doctor William Beaumont Award in Medicine.



Mrs. Walter (Jody) Jarrell (left) and Auxiliary President Mrs. Daniel B. (Gloria) Nunn, both of Jacksonville, await the opening of a session of the FMA House of Delegates.

Report F
Supplement to Report C
of the
Board of Governors

Report F, Supplement to Report C, of the Board of Governors was adopted.

Report F
Supplement to Report C
of the
Board of Governors

Robert E. Windom, M.D., Chairman

The following supplemental report of the Board of Governors has been prepared summarzing actions which was not included in the Board's Report in the Delegates' Handbook.

FMA Awards and Nominations

Resolution 82-3 — Awards and Nominations — was adopted by the House of Delegates calling for the General Session of the House of Delegates to be extended so that all awards and presentations may be made at the General Session. In keeping with Resolution 82-3, all awards will be presented at the General Session. Nominations requiring referral to Reference Committee and approval of the House of Delegates will have to be awarded at the second meeting of the House.

Recognition of Jere W. Annis, M.D. — The Board, after reviewing the distinguished medical career of Dr. Annis and his many efforts on behalf of the medical profession, recommends that he be given appropriate recognition for a job well done. The appropriate citation is included in the Delegates Notebook.

Certificate of Grateful Recognition — The Board enthusiastically approved a Certificate of Grateful Recognition to be presented at the 1983 FMA Annual Meeting to Mr. Whalen M. Strobhar, AMA Deputy Executive Vice President for Public, Scientific and Health Service Policy, in recognition of 25 years of outstanding contributions to the medical profession. The appropriate citation is included in the Delegates' Notebook.

Certificate of Grateful Appreciation — The Board recommends to the House of Delegates that a Certificate of Grateful Appreciation be extended to the Diplomat Hotel in commendation of 14 years of exemplary service in hosting the Annual Meeting of the Association.

RECOMMENDATION F-1

THAT THE HOUSE OF DELEGATES EXTEND TO THE DIPLOMAT HOTEL OWNERS, MARGE AND IRVING COWAN; EXECUTIVE VICE PRESIDENT, HAL CHANDLER; ALL THE OPERATING DEPARTMENTS; AND THE ENTIRE STAFF AND MANAGEMENT OF ALL LEVELS AND RANKS, ITS SINCERE APPRECIATION AND GRATITUDE FOR ALL PAST ADVICE, HELP AND SERVICE;

THAT THE FMA EXTEND TO THE DIPLOMAT HOTEL AND ITS EMPLOYEES ITS MOST SINCERE BEST WISHES FOR MANY MORE YEARS OF DEDICATED SERVICE AND PROSPERITY; AND

THAT THE DIPLOMAT HOTEL AND COUNTRY CLUB BE PRESENTED WITH A CERTIFICATE OF GRATEFUL APPRECIATION ON BEHALF OF THE FMA, OFFICERS, MEMBERS AND STAFF, FOR ITS MANY CONTRIBUTIONS TO THE SUCCESS OF THE FMA ANNUAL MEETINGS IN THE PAST AND IN ANTICIPATION OF CONTINUING THE SAME EXCELLENT RELATIONSHIP IN THE FUTURE.

Hernando County Medical Society Charter — The Board of Governors reviewed the recommendation of the Judicial Council to award a charter to the Hernando County Medical Society as a component of the Florida Medical Association.

The Council's recommendation included information substantiating the petition from a requisite number of physicians in support of the charter. Information indicated that the Executive Committee of the Citrus-Hernando County Medical Society and the membership of the society voted to endorse the new Hernando County Medical Society and feel that it will best meet the current rapid growth of the medical community in the area and the geographical distance problem that currently exists.

RECOMMENDATION F-2

THAT THE HOUSE OF DELEGATES APPROVE A CHARTER FROM THE FLORIDA MEDICAL ASSOCIATION TO BE ISSUED TO THE NEWLY FORMED HERNANDO COUNTY MEDICAL SOCIETY AS A COMPONENT SOCIETY OF THE FLORIDA MEDICAL ASSOCIATION.

Status of Litigations and Investigations

Optometry Issue — The Board continues to challenge the Board of Optometry in respect to a proposed rule regarding the use and prescription of drugs by Optometrists. FMA's original petition and amended petition which were filed in the administrative proceedings were dismissed on the basis that FMA did not have "legal standing" to contest the rule promulgated by the Board of Optometry. FMA appealed the hearing officer's order to the First District Court of Appeal in Tallahassee. The issue before the Court of Appeal was simply one of whether FMA had standing to challenge whether an Optometrist can prescribe drugs. It was our position that the hearing officer was unduly restrictive in his interpretation of the standing issue.

In an opinion filed February 2, 1983, the First District Court of Appeal reversed the order of the Administrative Hearing Officer and found that the Florida Medical Association and the Society of Ophthalmology does have standing to proceed against the rule being promulgated by the Board of Optometry in respect to the use and prescription of drugs. This was a significant ruling and will have great precedential value in the future as we attempt other issues involving encroachment of allied health professionals into the practice of medicine through administrative rules.

The final hearing before the Administrative Hearing Officer has been scheduled for June 13 through June 15, 1983.

Emily Gooding v. University Hospital Building, Inc., d/b/a Memorial Hospital of Jacksonville — This is a matter in which the Board authorized the filing of an amicus curiae brief on behalf of the Florida Medical Association. The issue which was decided by the First District Court of Appeal is a very important one on the question of causation in medical malpractice cases. Because of the great importance of this issue, it was certified to the Supreme Court of Florida and the FMA brief as filed in that court.

The case was a wrongful death case against an emergency room physician for failure to diagnose and treat a ruptured aneurism which led to the patient's death. The plaintiff's expert testified that had the emergency room physician not deviated from acceptable standard of care, the deceased would have had a fifty percent chance of having his life saved. The court held that the plaintiff's expert must at least offer testimony that is "more likely than not" that the conduct of the defendant was a substantial factor in bringing about the result. They specifically also held that "a mere possibility" of such causation is not enough.

The court also held for the first time that the "better chance" doctrine that has been loosely discussed in some Florida cases will not fit under the traditional concept of causation, and therefore, if the "better chance" doctrine is utilized, it should be recognized for what it is, i.e., a new cause of action which heretofore has not been recognized by either the Legislature or common law in the state of Florida. Both of the above concepts are extremely important in cases where there is evidence of a deviation by a health care provider where there is a real question on causation, i.e., did the deviation cause the damage. There are many cases that will survive beyond a directed verdict if the causation test is "possibility" or "better chance" rather than a "probability" or "more likely than not" test for causation. The causation issue is a vital one in a substantial number of malpractice cases.

At this time, all briefs have been filed in this case and the matter should be set for oral argument in the future.

Workers' Compensation Medical Surgical Fee Schedule — Territorial Differential and Seventy-Fifth Percentile — Oral argument and testimony was presented by the Florida Medical Association on the above referenced issue on Tuesday, December 15, 1982, to the Three Member Panel. Presenting testimony on behalf of the Florida Medical Association and the Dade County

Medical Association were James F. Richards Jr., M.D., Chairman of the FMA Committee on Workers' Compensation; Roger Welcher, Attorney for the Dade County Medical Association; Manford Ledford, Ph.D., Economist; Robert Nay, Staff, Blue Cross and Blue Shield of Florida, Inc.; William M. Howard, Ph.D., Economist; and John Thrasher, FMA Legal Counsel.

It was FMA's position that the Florida Workers' Compensation Act provides for the prevailing community charge for a given service to be paid to the health care provider or the health care providers usual and customary charge, whichever is less. Additionally, FMA argues that the current fee schedule should be raised to the 75th percentile of actual charges.

At this time, a decision which would be in the form of a recommended rule by the Three Member Panel has not been rendered.

The FMA was requested to enter into a joint stipulation of interpretation of the 1979 injunction against disclosure of Medicare information. The Board instructed legal counsel not to enter into the joint stipulation. The government subsequently filed a formal motion before their Court to accomplish what the proposed stipulation would accomplish. The Court ruled that the final permanent injunction entered on October 22, 1979, is construed not to prohibit disclosure by the Department of Health and Human Services or its agents of Medicare payment information about individual physicians where such disclosure is authorized under Five United States Code, Section 552, (b) (7). This particular section of the Federal Statutes authorizes disclosure of the information described above to another agency or to an instrumentality of any government jurisdiction within or under the control of the United States for a civil or criminal law enforcement activity, if the activity is authorized by law, and if the head of the agency or instrumentality has made a written request to the agency which maintains the record specifying the particular portion desired and the law enforcement activity for which the record is sought.

The Court's rationale for its decision was essentially that the sort of disclosure in which the original injunction was based addressed disclosure which was prohibited by the Privacy Act without the prior written consent of the affected individual. Therefore, the Court reasoned its injunction did not cover disclosure pursuant to the so-called "law enforcement exception." Any disclosure made which does not fall within the "law enforcement exception" remains prohibited by the Privacy Act and by the Court's initial injunction.

PMUR Antitrust Issue — The Board, when first learning about the decisions by the United States Supreme Court relative to "peer review", felt that they would have a significant input on the "peer review" activities of county medical societies, insurance companies and health care intermediaries such as Blue Cross and Blue Shield.

On October 14, 1982, John Slye, Legal Counsel for Blue Cross and Blue Shield of Florida, Inc., provided FMA with his view on the legal implications of the recent decisions. Mr. Slye essentially informed us that the Supreme Court decisions only removed the McCarron-Ferguson exemption, but did not specifically deal with the issue of whether peer review activities by a third party organization such as the Florida Medical Foundation would constitute violation of the antitrust laws.

The Board felt that the Federal Government, through Blue Cross and Blue Shield of Florida, Inc., has disclosed their willingness to provide an indemnification and hold harmless the provision in the contract with the Florida Medical Foundation. The Board agreed with FMA Legal Counsel that if a similar hold harmless and indemnification were extended to not only the Foundation but the individual physicians who participate in PMUR activities as well, it would be worth considering reinstituting the "peer review" effect.

Professional Liability

Florida Medical Association Professional Liability Teleconference — The Florida Medical Association made history on April 27, 1983, when it became the first state medical association to use "Teleconferencing" as a means of communication with the FMA and AMA Auxiliary membership. In addition, the FMA Teleconference made history a second time by being the first satellite program of its type and scope to be set up in such a short period of time.

Participants in the program included Dr. Robert E. Windom, President; Dr. J. Lee Dockery, President-Elect; Dr. T. Byron Thames, Chairman, FMA's Committee on Professional Liability; Senator Mallory E. Horne, FMA's Legislative Consultant; and Senator George Kirkpatrick, Sponsor, FMA's Professional Liability Program, SB 1017.

The purpose of the FMA Teleconference was to advise all FMA and Auxiliary members of the current status of FMA's proposed liability tort reform package that is pending before the 1983 Legislature and to impress upon the membership the individual actions that must be taken if meaningful legislation to resolve the medical and professional liability crisis is to be enacted during the 1983 Session.

The conference originated in Tallahassee at WCTV, Channel 6, from 7:15-8:15 p.m. (6:15-7:15 p.m. in Pensacola only) and was beamed live to locations in 12 Florida cities.

Professional Liability Assessment — The Board has evaluated the adequacy of available funds from the professional liability assessment to carry out the FMA's professional liability legislative program. The Board is of the opinion that, if all eligible members pay the assessment of $50.00 as authorized by the House of Delegates, there will be adequate funds to carry out the current activities without the need for an additional assessment at the present time.

Candidates for Election to AMA Council on Medical Education and Council on Scientific Affairs

On April 12, 1983, the American Medical Association announced that the AMA Board of Trustees had nominated FMA President-Elect, J. Lee Dockery, M.D., Gainesville, as a candidate for the Council on Medical Education, and Warren Lindau, M.D., Miami, as a candidate for the Council on Scientific Affairs, at the 1983 Annual Meeting of the AMA House of Delegates in June, 1983. The Board of Governors and the FMA/AMA Delegation urge your support of Florida's two fine candidates.

Report H of the Board of Governors

Report H of the Board of Governors was adopted.

Report H of the Board of Governors

Robert E. Windom, M.D., Chairman

The following supplemental report of the Board of Governors has been prepared to include nominations and elections to the Committee on Membership and Discipline.

Committee on Membership and Discipline

Because of congressional redistricting it is necessary for the House of Delegates to vote on the entire membership of the Committee on Membership and Discipline. Members whose terms have not yet expired and whose congressional district changed as a result of redistricting have been moved to the appropriate new district.

The Board, therefore, submits to the House of Delegates, the following nominations for election from the districts and for the terms indicated:

District 1: Rufus Thames, M.D. (85)
Robert C. Palmer, M.D. (84)
James T. Cook III, M.D. (87)
Lealis L. Hale Jr., M.D. (86)

District 2: Robert P. Johnson, M.D. (87)
James T. Cook Jr., M.D. (84)
Herbert E. Brooks, M.D. (85)
James K. Conn, M.D. (86)

District 3: Hugh A. Carithers, M.D. (87)
John A. Rush, M.D. (84)
Joe C. Ebbinghouse, M.D. (85)
Samuel J. Alford Jr., M.D. (86)

District 4: Charles Barrineau, M.D. (87)
Richard W. Snodgrass, M.D. (84)
Bruce R. Witten, M.D. (85)
H. Frank Farmer Jr., M.D. (86)

District 5: Calvin R. Peters, M.D. (87)
Clarence M. Gilbert, M.D. (84)
Frederick J. Weigand, M.D. (85)
Jorge Gomez, M.D. (86)

District 6: W. Thomas Hawkins, M.D. (87)
Thomas D. Bartley, M.D. (84)
Samuel L. Renfroe, M.D. (85)
J. Maxey Dell Jr., M.D. (86)

District 7: Linus W. Hewit, M.D. (87)
William B. Hopkins, M.D. (84)
Jeff W. Harris, M.D. (85)
J. Robert Qualey, M.D. (86)

District 8: William E. Hale, M.D. (87)
John T. Karaphillis, M.D. (84)
Royce Hobby, M.D. (85)
James C. Fleming, M.D. (86)

District 9: Paul G. Winquist, M.D. (87)
Joseph P. LeVine, M.D. (84)
Bettie R. Drake, M.D. (85)
Ross G. Olson, M.D. (86)

District 10: William Allen Boyce, M.D. (87)
Wiley E. Koon, M.D. (84)
James D. Morgan, M.D. (85)
Thomas R. Busard, M.D. (86)

District 11: David Tingle, M.D. (87)
John D. Rao, M.D. (84)
Richard N. Baney, M.D. (85)
Francis S. Pooser, M.D. (86)

District 12: V. A. Marks, M.D. (87)
Luis R. Guerrero, M.D. (84)
Reginald J. Stambaugh, M.D. (85)
Fred S. Carter, M.D. (86)

District 13: Richard C. Rehmeyer, M.D. (87)
Douglas R. Murphy, M.D. (84)
Martin F. Mihm, M.D. (85)
*Joseph P. O'Bryan, M.D. (86)

District 14: Lee A. Fisher, M.D. (87)
William J. Romanos, M.D. (84)
James Smith, M.D. (85)
E. Joan Bariee, M.D. (86)

District 15: Stanley Goodman, M.D. (87)
Anthony J. Vento, M.D. (84)
Robert J. Brennan, M.D. (85)
Peter A. Tomasello, M.D. (86)

District 16: Nester C. Guaty, M.D. (84)
Jose F. Landa, M.D. (85)
Leon Talan, M.D. (86)
William C. Hartley, M.D. (87)

District 17: Richard C. Clay, M.D. (84)
Maurice H. Laszlo, M.D. (85)
John G. Maclure, M.D. (86)
Charles A. Monnin, M.D. (87)

District 18: Jerome Benson, M.D. (84)
Richard M. Fleming, M.D. (85)
Sheldon Zane, M.D. (86)
Everett Shocket, M.D. (87)

District 19: Rufus K. Broadaway, M.D. (84)
Chester Cassel, M.D. (85)
Norman Gottlieb, M.D. (86)
John D. White, M.D. (87)

Report of Public Relations Officer

The Report of the Public Relations Officer was adopted.

Public Relations

Vernon B. Astler, M.D., Public Relations Officer

During 1982-83 the efforts of the FMA Public Relations Program, through the Department of Communications, have been focused on remedial measures to resolve the professional liability insurance crisis in Florida and on improving FMA's communications with county medical societies, specialty groups and individual members.

Work in the area of professional liability insurance reform has included the development of audio-visual and printed materials; arrangements for radio and television appearances; visitations with newspaper editorial boards; development of a system for response to media inquiries; and coordination of efforts with other health care providers, as well as keeping the FMA membership informed of progress through various publications.

In developing this program, the Communications Department has been working closely with the Public Relations Department of the Professional Insurance Management Company (PIMCO). The recent retention of retired *Florida Times-Union* Political Editor Hank Drane of Jacksonville has been a valuable plus in our approaches to the media regarding the PLI crisis.

Following are some of the major specific activities undertaken with regard to the PLI reform program:

1. **Slide/Sound Presentation:** A 23-minute slide/sound program entitled "With Reason and Justice . . ." was produced through the facilities of a professional production company in Jacksonville and was shown for the first time in October 1982. Narrated by Edward R. Annis, M.D., this highly-acclaimed program first provides the background of the crisis, describes the current situation, then addresses the various legislative tort reforms, proposals to the judiciary and constitutional amendments proposed by FMA.

 As of mid-February, this program has been shown, or was scheduled to be shown, to about 35 different county medical societies, specialty groups, hospital medical staffs and lay organizations.

 In addition, approximately 75 videotape reproductions of this program were purchased in January and distributed to selected hospitals in the state for viewing by departmental staffs and groups of individual physicians.

 Whereever possible, FMA President Robert E. Windom, M.D., or some other knowledgeable FMA official has made a personal appearance to introduce the presentation and answer audience questions.
2. **Program Brochures:** An attractive 20-page brochure entitled "A Program of 'Reason' . . . Defendants' Rights in Civil Actions" was developed and distributed to all members of the Florida Medical Association. This is FMA's Report and Recommendations to the 1983 Legislature, the Judiciary, and the Citizens of Florida. It summarizes the problems and the proposals FMA will make in seven legislative recommendations, three judicial recommendations and five constitutional amendments.
3. **PLI Packets:** Packets of information primarily designed for key contact physicians in their contacts with state legislators concerning the professional liability proposals were prepared and distributed in January. They included several printed pieces, including the brochure "A Program of 'Reason' . . . Defendants' Rights in Civil Actions".
4. **Media Notebooks:** All news stories, editorials and letters to the editor concerning the PLI crisis and FMA's "Reason '83" program published in Florida newspapers are being preserved and filed in media notebooks. These are filed in chronological order by newspaper. By consulting one of these notebooks one can assess readily a particular newspaper's interest in the problem, determine the questions that are being asked and evaluate the newspaper's editorial attitude.
5. **Editorial Visitations:** The PLI crisis and the FMA remedies constitute the primary discussion topic during this year's round of editorial visits. At mid-February, conferences between FMA officials and the editorial boards of the following newspapers either had taken place or were scheduled: *Tallahassee Democrat; Miami Herald; Miami News; Palm Beach Post; Fort Lauderdale News* and *Sun-Sentinel; Sarasota Herald-Tribune; Orlando Sentinel; Tampa Tribune;* and *St. Petersburg Times*. Arrangements also were being made for other visitations.
6. **Pamphlet for Doctors' Offices:** A pamphlet discussing the crisis and the FMA solutions in every-day terms was published and offered to physicians for placement in their reception rooms. The purpose of this publication is to enlist public understanding and support for the FMA program.
7. **Providers Coalition:** FMA communications and legislative personnel held a series of meetings with counterparts of the Florida Osteopathic Medical Association, the Florida Hospital Association and other hospital groups to coordinate their efforts in the area of PLI reform.
8. **Media Inquiries:** Plans have been developed to give the media rapid access to a knowledgeable FMA official for the purpose of answering their questions and commentary on day-to-day developments both before and during the 1983 legislative session.
9. **Response to Negative Accounts:** County medical societies have been encouraged to rebut false, misleading or damaging statements appearing in newspaper, radio or television accounts. FMA assistance in fashioning responses is available if requested.
10. **News Releases:** News releases have been and will be issued at appropriate times to make FMA's position known to all the media in Florida.
11. **Radio and Television Interviews:** FMA has received several requests from Florida radio and television stations to provide individuals for on-the-air discussion or debate of the PLI issue. Such requests are coordinated with the FMA Speakers Bureau.

Intraorganizational Communications

Considerable attention has been given to fine-tuning intra-organizational communications, particularly *FMA Briefs* and the *Graypaper*.

All FMA staff departments are now contributing news on a regular basis for these two publications, thereby making them more interesting and useful to FMA members. Additionally, both are now on a regular publication schedule, with *Graypaper* being published on the first Wednesday of each month; *FMA Briefs* is produced quarterly, on the third Wednesday of January, April, July and October.

County medical societies and specialty groups are invited to submit news for possible publication in the newsletters.

Other Activities

The public relations/communications program has encompassed several other activities, and the following are among the most significant:

1. **Medical Message Columns:** FMA continues to prepare and distribute health tips in the form of medical message columns to the newspapers of Florida on a semi-monthly basis. Usage by weekly newspapers has been particularly gratifying.

 Efforts are made to make the messages as timely as possible. For example, a column on holiday hazards was mailed to newspapers just before the December holidays.

 A separate column, geared to the teen-age set, is distributed monthly during the school year to high school newspapers.
2. **Radio Public Service Announcements:** A survey of Florida radio stations in 1982 indicated a need to revise the format for the monthly recorded public service announcements that have been distributed to both AM and FM outlets. This is under consideration, and it is expected that the program will be resumed in the near future.
3. **Pamphlets and Brochures:** The public relations/communications office is called upon to prepare printed pieces for specific purposes from time to time. A recent example of note is a pamphlet describing the various advantages of belonging to FMA.
4. **FMA-Produced Films:** In previous years, FMA produced three half-hour films, all of which are shown on television in the

state. There is still a great demand from civic groups, television cable systems, school systems and others for these three titles — *It's Your Life, A Matter of Life,* and *Edge of Life.* Prints are available on a loan basis free of charge.

5. **Contests:** The Medical Journalism Awards Contest, devised a few years ago to encourage excellence in medical reporting by both electronic and print media, was conducted again this year and awards will be presented at the Annual Meeting. The Medical Speakers and the Medical Malpractice Prevention Awards programs also were renewed.
6. **Services to Other FMA Departments:** The public relations/communications programs have provided professional assistance to various FMA councils and committees and staff departments. One recent example was the development of a script for a videotape program the Committee on Relative Value Studies plans to produce to explain usage of the 1982 FMA RVS.

 Ongoing services provided include editing and publishing the FLAMPAC Newsletter (for FLAMPAC) and preparation of *The Legislative Bulletin* for the Capital Office and the Council on Legislation.

 Key contact physician and legislative manuals also were developed.

Committee on Professional Liability

The Report of the Committee on Professional Liability was adopted.

Committee on Professional Liability

T. Byron Thames, M.D., Chairman

The 1983 Annual Report of the Committee on Professional Liability will summarize the major areas of activity of that Committee since the last Annual Meeting of the Florida Medical Association held in May of 1982. The Committee's charge was to review and evaluate the current crisis in professional liability and make appropriate recommendation to the Board of Governors on the crisis. Since the last Annual Meeting of the Association the Committee has met on the following occasions: June 30, 1982; July 28, 1982; and October 4, 1982. The membership of the Committee is as follows: T. Byron Thames, M.D., Chairman; Vernon B. Astler, M.D.; Jack A. MaCris, M.D.; A. Fred Schild, M.D. and Jerry D. Moore, M.D. The Committee has been staffed by John E. Thrasher, Esq., FMA Legal Counsel.

The Committee's activities are summarized under the following heading:

The Charge of the Committee

Since this Committee's creation in 1981, it has been engaged in an in-depth review of the current status of professional liability in the state of Florida as it affects the medical profession and specifically members of the Florida Medical Association. An initial report by the Committee provided an in-depth review of the professional liability situation in Florida and was presented to and adopted by the Florida Medical Association Board of Governors on October 8, 1981 (see *The Journal of the Florida Medical Association, Inc.*, November 1981). This report served as a framework and foundation for the continuing deliberations of the Committee that culminated in its specific recommendation to the public, to the judiciary and to the legislature. Those recommendations were adopted by the Board of Governors of the Florida Medical Association in August of 1982.

Committee Deliberation

After the 1982 meeting of the FMA House of Delegates, it was apparent to the Board of Governors that professional liability would be the central issue for the Association during the upcoming year. During the numerous meetings throughout the summer of 1982, the Committee was assisted in its deliberations by FMA officers, representatives of the Council on Legislation, consultants and staff.

The Committee accomplished an in-depth review during its initial meeting of their past activities in respect to tort reform that had been proposed by the Florida Medical Association. It should be noted that since 1975 the Florida Medical Association has expended a great deal of time, energy and money in accomplishing numerous tort reforms. However, it was further noted that notwithstanding these reforms, the medical profession was faced with another serious medical malpractice crisis.

The Committee sought the advice of insurance experts, legislative consultants and others in formulating its recommendations. In addition to this, information was received that indicated that the Florida Supreme Court did not wish to interject itself into attempting to resolve the professional liability problems being experienced in the state. In addition, during the numerous meetings of the Committee, information was received from county medical societies, other states, and numerous individuals who are concerned about this problem.

Each concept was reviewed individually and our consultants surveyed the key leadership of the House and Senate as to the feasibility of our program and other options which the leadership of the House and Senate felt might be viable. In addition to this information, Mr. Roy Pfautch, the FMA Public Relations Consultant presented the results of a public opinion survey relative to the public sentiment in regard to various aspects of the malpractice crisis and the potential for public support in resolving this crisis. It is important to note that the survey reflected that the overwhelming majority of citizens expressed strong confidence in their individual physician and the quality of medical care in this state. The survey also reflected a broad recognition and an informed knowledge of the professional liability problem, as well as significant support for innovative proposals for long term solutions in resolving this problem.

Committee's Recommendation

After careful consideration of the numerous options, the Committee recommended to the Board of Governors that the following program be adopted. The threefold program includes fundamental reforms in the tort system, proposals for court rules and a long term proposal dealing with constitutional revision. This program was presented to the entire membership of the Florida Medical Association in the form of a brochure entitled *A Program of Reason . . . Defendants' Rights in Civil Actions, the Report and Recommendations to the 1983 Legislature, the Judiciary and the Citizens of Florida from the Florida Medical Association, Inc.*

Legislative Recommendations to the 1983 Legislature

1. Mandatory statutory periodic payment of all future economic damages such as hospital and medical bills, loss of earnings or earnings capacity, and attorneys' fees, with the reverter of unexpended funds for medical expenses to the party paying these expenses should the claimant die or some other event occur where funding is no longer necessary, prior to the termination of the period of years during which such payments are to be made, and that this provision be applicable to all personal injury cases.
2. Transfer of punitive damage allegations from civil litigation cases to the criminal court system with damages payable to the state of Florida.



FMA Executive Director Donald C. Jones and T. Byron Thames, M.D.

3. Removal of joint and several liability in personal injury cases.
4. Limitation of attorneys' fees (pursuant to the New Jersey Supreme Court Schedule) based upon the amount of recovery in civil litigation.
5. Establishment of a mandatory statutory limitation ($250,000.00) on recovery of damages for pain and suffering and other non-economic losses; mental anguish, loss of capacity for enjoyment of life, etc., that would be applicable to all personal injury cases.
6. Establishment of a statutory provision regarding the application of the summary judgment procedure in all civil cases.
7. Strengthening of existing statutes relative to remittitur-additur requiring the trial judges to reduce or increase a jury award when it is excessive or inadequate.

Judicial Petitions to the Florida Bar and Florida State Supreme Court

1. Adopt the New Jersey concept for contingency fees limitations.
2. Adopt a stronger rule regarding the application of summary judgments.
3. Adopt a pre-trial screening panel mechanism for the resolution of civil actions.

Constitutional Revision

1. Creation of a new right in Article 1 of the Florida Constitution entitled *Rights of Defendants in Civil Actions* that would provide for summary judgments, limitation on general and non-economic damages and for the elimination of joint and several liability.
2. Removal of the requirement that a Justice of the Supreme Court be a member of the Florida Bar (an attorney), thus opening membership on the Supreme Court to non-lawyers. (Same qualifications as Governor).
3. Removal of attorneys' licensure and discipline from the jurisdiction of the Florida Supreme Court and regulation by general law in the same manner as other professions, e.g., Department of Professional Regulation.
4. Repeal of provisions of the Constitution relating to the Judicial Nominating Commission for Supreme Court Justices, thus requiring the Supreme Court Justices to be elected by the electors of the state, as other state and county officials are elected. (Whether partisan or non-partisan to be determined.)
5. Adoption of a requirement that the Supreme Court of Florida by rule establish a procedure for the processing of civil actions with the view toward discouraging baseless actions and encouraging settlement of those actions based on reasonable probability, e.g., the creation of a court rule of pre-trial screening panels.

The Chairman would like to express appreciation for the contributions of the members of the Committee and others who provided input in the Committee's deliberations during the year regarding the serious professional liability dilemma in our state. Appreciation is also extended to Mr. John Thrasher who has provided such excellent staff support to the Committee.

Committee on Management

The Report of the Committee on Management was adopted.

Committee on Management

Vernon B. Astler, M.D., Chairman

In compliance with the request of the Executive Vice President to be relieved of his responsibilities with the Association in April (later changed to May), 1984, (ending 35 years of service) the Board of Governors appointed a special Committee on Management in May 1980 to study and make recommendations regarding the position of the Association's Chief Executive Officer and the transition period.

The Board of Governors in 1981 approved reorganization of FMA senior staff responsibilities and further directed that the Executive Vice President, W. Harold Parham, D.H.A., retain responsibility for finances and policy implementation and continue to transfer all operational responsibilities to the Executive Director, Donald C. Jones. The Board of Governors reported to the House of Delegates at its 1982 Annual Meeting that the transition in management was proceeding in a satisfactory manner including the designation of the Executive Director as the Chief Executive Officer as of January 1982.

The Committee on Management has continued during the transition period to evaluate the performance of the senior executive staff. The Committee is pleased to report that during the current Association year the transition of the FMA management responsibility of the Executive Vice President to the Executive Director has been carried out in an orderly and highly efficient manner in every respect.

Current members of the Management Committee include James B. Perry, M.D., Speaker; T. Byron Thames, M.D., Past President; current President, Robert E. Windom, M.D.; and President-Elect, J. Lee Dockery, M.D.

Committee on Membership Development

The Report of the Committee on Membership Development was adopted.

Committee on Membership Development
Luis M. Perez, M.D., Chairman

The Committee on Membership Development at the conclusion of its first year is convinced that strength in numbers enables medicine to present a unified effective voice in responding to the crucial issues of our time.

The Board of Governors in reviewing the actions of the 1980 Interim Meeting of the AMA House of Delegates, noted a growing concern over the decline in AMA membership. The Board requested that every possible effort be made to increase AMA membership in Florida. Your Committee on Membership Development is pleased to report that physicians in Florida have responded magnificently. From December 31, 1981 to December 31, 1982 membership in the AMA from Florida grew from 7,451 to 10,056, an increase of 2,605 or a 35% growth. Thus, Florida now has 11 delegates to the AMA House of Delegates, an increase of 3 in just one year.

While your Committee recognizes that increasing AMA membership is of vital importance, it is equally important that we dedicate the next Association year to increasing physician participation at the county and state levels. In addition, it is time to encourage more medical students, interns and residents to get involved in organized medicine.

Such a membership campaign is gearing up. Your Committee has met with representatives of the AMA and the Florida Medical Association Auxiliary to assure that we are all maximizing our mutual efforts. Your Chairman has met with the medical student from the University of South Florida and will soon meet with the medical students from the University of Florida and the University of Miami. Staff has met with the executives of both Duval and Hillsborough Counties in preparation for two pilot programs designed to determine the most effective way to recruit new members while at the same time not placing any undue hardship upon the county medical society. What we learn in Duval and Hillsborough will be shared with all component county medical societies.

A major problem that the Committee has had to overcome is finding the best way to identify physicians who are not members of their county medical societies and the FMA. Staff reports that part of this problem may be solved by the new FMA computer capabilities and information currently available through the AMA.

Your Committee has made some strides this year and with the support and help of the county medical societies and each FMA member, we should see greater accomplishments at the end of our next Association year.

AMA Delegates

The Report of the AMA Delegates was adopted.

AMA Delegates
Charles K. Donegan, M.D., Chairman

It has been a continued pleasure for me to serve as Chairman of your Florida AMA Delegates during the past year with the able assistance of our Vice Chairman, Joseph C. Von Thron, M.D.

Your delegates and alternate delegates who gave freely of their time and effort did much to enhance the effectiveness and influence of our delegation at the national levels. A great deal of appreciation goes to:

T. Byron Thames, M.D., Delegate
Samuel M. Day, M.D., Delegate
Burns A. Dobbins Jr., M.D., Delegate
Richard G. Connar, M.D., Delegate
Charles J. Kahn, M.D., Delegate
Joseph C. Von Thron, M.D., Delegate
Louis C. Murray, M.D., Delegate
Vincent P. Corso, M.D., Alternate
Luis M. Perez, M.D., Alternate
Frank C. Coleman, M.D., Alternate
Eugene G. Peek Jr., M.D., Alternate
Vernon B. Astler, M.D., Alternate
James W. Walker, M.D., Alternate
Sanford A. Mullen, M.D., Alternate

We are pleased to have two new members to our delegation, Louis C. Murray, M.D., Delegate Seat #8 and Sanford A. Mullen, M.D., Alternate Delegate Seat #8. In addition, Robert J. Brennan, M.D., representing Allergy, and Thomas D. Bartley, M.D., representing Thoracic Surgery participated in our activities and contributed greatly to our overall efforts.

I want to make special note of the fact that FMA officers and representatives of the Board of Governors, as well as officers and executive staff from FMA's component county medical societies, attended the meetings and supported our delegation.

The AMA House was confronted by a wide range of issues. The following is a summary of major actions taken by the House, and of the activities of our Florida delegation during the Annual Meeting, June 13-17 and the Interim Meeting, December 5-8. The activities of your delegates have been reported to the FMA Board of Governors and the FMA membership through various Association publications.

Candidates for Elective Office:

Your delegation is proud to report the election of our own Rufus K. Broadaway, M.D., to the AMA Board of Trustees. With approval and support of the FMA Board of Governors, a hard working delegation with the able assistance from the FMA Auxiliary, we were able to prevail in this most important election. A special recognition should be extended to Frank C. Coleman, M.D., and the members of Dr. Broadaway's campaign committee for their exemplary efforts in helping to bring about this election.

Recently your delegation presented to the AMA Board of Trustees for nomination to the Council on Medical Education the name of J. Lee Dockery, M.D., of Gainesville, and for nomination to the Council on Scientific Affairs, the name of Warren Lindau, M.D., of Miami.

Florida's 9th, 10th and 11th Delegates:

Recently we were informed that Florida's strength will be increased by three new delegates. This was made possible by the Florida which now is 10,056. The top eight states in terms of number of delegates in 1983 will be as follows:

California	25
New York	21
Illinois	17
Texas	16
Pennsylvania	15
Ohio	14
Florida	11
Michigan	11

Thus, Florida continues to grow in strength and influence in the AMA House of Delegates.



FMA's delegation to the American Medical Association House of Delegates held a caucus during the FMA Annual Meeting to plan strategy for the AMA Annual Meeting in June. Seated (left to right): President-Elect J. Lee Dockery, M.D., Gainesville; Burns A. Dobbins Jr., M.D., Fort Lauderdale; Samuel M. Day, M.D., Jacksonville; Rufus K. Broadaway, M.D., Miami; Charles K. Donegan, M.D., St. Petersburg; Joseph C. Von Thron, M.D., Cocoa Beach; and President Robert E. Windom, M.D., Sarasota. Standing: James W. Walker, M.D., and Sanford A. Mullen, M.D., both of Jacksonville; Eugene G. Peek Jr., M.D., Ocala; Frank C. Coleman, M.D., Tampa; T. Byron Thames, M.D., Orlando; Luis M. Perez, M.D., Sanford; Vincent P. Corso, M.D., Miami; Louis C. Murray, M.D., Orlando; Charles J. Kahn, M.D., Pensacola; and Vernon B. Astler, M.D., Boynton Beach.

Southeastern Delegation:

Your delegation was again active in the Southeastern Delegation which is composed of the following states:

Alabama	Maryland
Delaware	Mississippi
District of Columbia	North Carolina
Florida	South Carolina
Georgia	Virginia
Louisiana	

Activities at the Annual and Interim Meetings have included a breakfast caucus on Sunday morning, at which time the major items of business to be addressed by the House were discussed, and a reception sponsored by the delegation on Monday evening.

Resolutions

The Florida delegation introduced Resolution 54, **CME Accreditation Handbook,** at the Annual Meeting which asked that the AMA representatives to the Accreditation Council for Continuing Medical Education seek reversal of the action taken by the ACCME to defer development of a handbook to accompany the *Essentials* of continuing medical education. Report E of the Council on Medical Education was adopted as amended in lieu of Resolution 54. The amendment to Report E was:

> "The proposed *Essentials* be approved contingent upon the approval of the House of Delegates of *Guidelines* to be used by the ACCME in its accreditation of national sponsors of continuing medical education."

Your delegation introduced Resolution 9, **Limitation of Liability in Administering Vaccine,** at the Interim Meeting which asked AMA to strongly support national legislation limiting the increase of AMA dues paid and dues exempt members from liability of the manufacturer and administrator of vaccines. Substitute Resolution 9 was adopted in lieu of our resolution which states:

> RESOLVED, That the American Medical Association support appropriate state and federal legislation which would hold physicians and manufacturers harmless for adverse reactions to immunization required by state and federal law for prevention of communicable diseases, providing the immunizing agents are manufactured and administered without negligence.

AMA House Actions of Major Importance:

The following is a summary of major actions taken by the AMA House of Delegates:

1. **Health Policy Agenda for the American People:** A great deal of discussion took place in the House regarding AMA's effort to develop a national health policy, which includes the development of basic principles to reflect the private sector's philosophy on health care and a health policy plan containing the private sector's view of what should happen in the health field, both of which will provide a basis for the private sector to determine a national agenda for dealing with health issues.

 The House directed that the AMA forward timely reports of the National Health Policy Agenda Steering Committee to all state medical societies and AMA delegates and alternates for review and input. Also, that each work group be increased by two members who are in the private clinical practice of medicine and selected by the AMA President on a regional basis and that one additional individual be appointed to each work group by the Board of Trustees.

2. **Federal Trade Commission:** Several resolutions were adopted which, in essence, supported the AMA's efforts in obtaining passage of legislation; amend the FTC Act to clarify that the FTC has no jurisdiction over the professionals; prohibit the FTC from preempting state laws; and cause the FTC to make major procedural reforms. This effort was dealt a severe blow when the Senate recently defeated the AMA's sponsored legislation.
3. **Medical Licensure:** The AMA is to urge each state medical licensing board to permit graduates of LCME (Liaison Committee on Medical Education) accredited programs to be licensed for the independent practice of medicine prior to the second year of residency training.
4. **Hospital Accreditation:** The House adopted a policy that hospital accreditation procedures be utilized primarily to evaluate and improve the quality of patient care, and opposed rigid, uniform, mandatory requirements for the hospital, its governing board, attending staff, and committees.
5. **Definition of "Physician":** The House reaffirmed the definition of physician as adopted at the 1972 Annual Meeting:

 > A physician is a person, who having been regularly admitted to a medical school, duly recognized in the country in which it is located, has successfully completed a prescribed course of studies in medicine and has acquired the requisite qualifications to be legally licensed to practice medicine.

6. **Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA):** The House directed that appropriate opposition be expressed through action in Congress, the Administration, and the Courts to regulations under TEFRA which interfere with and/or redefine the practice of medicine, substitute hourly wages or annual salaries for present reimbursement or any system which does not give recognition to knowledge, skill, time, and effort and otherwise infringe significantly upon the practice of medicine.
7. **Diagnostic Related Groups (DRG):** The House voted to caution the Congress and the Department of Health and Human Services that implementation of the DRG concept should be on an experimental basis only and restricted to selected areas before imposed nationally and that the government broaden its experimental reimbursement formula beyond the DRG concept. The House will continue to monitor this program.
8. **Size and Composition of the House of Delegates:** A report addressing the size and composition of the House of Delegates generated much attention. The House reaffirmed the value of specialty society representation and affirmed that the societies should continue to meet the criteria that originally gained them a seat in the House. The American Hospital Association and the American Dental Association will be invited in the future to send observers to AMA meetings. The House urged state societies to elect medical students and residents to their delegations. A recommendation to provide a delegate seat for state society presidents and to provide proportional representation to specialty societies was rejected. Dr. Rial in his President's Address suggested that the National Medical Association and the American Osteopathic Association be included. Dr. Rial's suggestion was referred to the Board of Trustees for further study.
9. **JCAH Manual — Proposed Medical Staff Revision:** The House commended the AMA Commissioners to the JCAH for their efforts to develop methods of preserving involvement in maintaining quality patient care throughout the process of revising the "Accreditation Manual for Hospitals", and voted to reaffirm existing AMA policy on the objective of hospital accreditation.
10. **Report of the Study Committee on Hospital Medical Staff:** The House adopted in essence the report of the Study Committee that establishes a Hospital Medical Staff Section with a delegate in the House.
11. **Peer Review Improvement Act of 1982:** The House directed that if the AMA's effort to strengthen those elements of the UQCPRO program which are consistent with AMA policy on medical peer review, and retain professional direction and contact with emphasis on quality rather than cost prove unsuccessful, then AMA should seek repeal of the Durenberger Bill.
12. **CME Accreditation:** The House voted to approve the *Essentials* for Accreditation contingent upon the approval by the House of Delegates of *Guidelines* to be used by the ACCME in its accreditation of national sponsors of continuing medical education.
13. **Physician's Prescription for Drugs, Eyeglasses, Contact Lenses:** The House adopted a policy which states that a patient is entitled to a copy of the physician's prescription for drugs, eyeglasses, contact lenses, or other devices as required by the "Principles of Medical Ethics" and as required by law, and the patient has the right to have the prescription filled wherever he wishes.
14. **Insurance Assignments:** The House accepted a resolution calling for the AMA to investigate the frequency of erroneous payments to insurance beneficiaries instead of to physicians to whom they have assigned such payments and seek, in consultation with appropriate agencies, the minimizing or elimination of such problems.
15. **Alternative Proposals for Health Planning:** The House voted to establish as policy of the AMA: Support of health planning on a local and voluntary basis with considerable physician input; support of implementation of appropriate local health plans by the cooperative effort of the local community; and support of the concept that if regulatory functions should arise, they should be conducted independently of the planning process. Also, the House voted to continue the effort to repeal the federal Health Planning Act.
16. **Physician-Patient Relationship:** The House voted to reaffirm its policy that physicians are free to choose their patients, their associates, and the environment in which to provide medical services, except in emergencies.
17. **Postpayment Utilization Review:** The AMA was instructed by the House to promote a change in Medicare regulation and policy to limit postpayment utilization review and requests to recoup payments to claims that are no more than two years old from date of submission, except in cases of suspected fraud.
18. **Designation of Areas of Medical Need:** The AMA is to request the federal government to consolidate the federal designation process for identifying areas of medical need and coordinate the process with state agencies as well as ask for state and local medical society approval of the designated underserved areas, and to establish rules requiring automatic cessation of federal subsidies in the final year following the year in which manpower guidelines are met unless the subsidy is for medical education purposes.
19. **Drug Paraphernalia:** The House adopted a policy opposing the manufacture, sale and use of drug paraphernalia.
20. **Medical Education:** A comprehensive report based on 36 recommendations on the topics of generalism and specialism, preparation for and admission to medical school, undergraduate medical education, specialism, graduate medical education, specialty boards, licensure, CME and graduates of foreign medical schools was approved.
21. **Computerized Information Network:** The GTE Telenet Medical Information Network, which was unveiled at the meeting and is presently undergoing tests, will provide four data bases, licensed and maintained by the AMA. Through

the use of existing telephone lines, these data bases will provide information on drugs, disease, socio-economic bibliographies and medical procedure coding and nomenclature, as well as an electronic mail system offering instant transmission of written messages between subscribers.

22. **Other Actions:**

- Approved the need for more study of second surgical opinion programs;
- Supported equivalent benefits for third-party coverage of psychiatric services;
- Encouraged employers who provide medical examinations to assure that the exams are done by physicians competent to perform the types of exams required;
- Requested alleviation of the inequities resulting from the Medicare Economic Index and the attempt to repeal the Index;
- Encouraged carriers to recognize chemotherapy in physicians' offices;
- Urged strong federal enforcement of environmental regulations;
- Encouraged Congress to enact laws permitting tax deferments on money set aside to fund insurance deductible amounts of $500 or more with no tax or interest penalty if funds are withdrawn to pay medical expenses;
- Voted to study the rationality of the VA's schedule for rating disabilities;
- Supported model state legislation for compensation for immunization reactions;
- Requested placement of warnings on cigarette packages;
- Supported the concept of a federal office on Smoking and Health;
- Supported multiple levels of nursing education;
- Urged promotion of the availability of medical student loans;
- Approved termination of the preferential immigration policies for foreign medical graduates;
- Opposed attempts to use accreditation and certification processes in graduate medical education as a means of controlling the number of physicians in any specialty;
- Supported open staff privileges;
- Affirmed support for the Civilian Military Contingency Hospital Support System;
- Urged labeling of declarations of sodium content;
- Approved informing the public that the PDR is not a standard practice;
- Encouraged the donation of organs;
- Requested the study of problems in developing countries of improper marketing of hazardous pharmaceuticals;
- Outlined steps needed to protect amateur and professional boxers from injuries;
- Promoted blood donations;
- Approved a study of cochlear implants for their efficacy and safety;
- Adopted new criteria for AMA dues exemption;
- Considered two reports addressing the issue of competition in medicine;
- Continued opposition to changes in the Medicaid hospital reimbursement systems that result in cost shifting to private patients;
- Adopted a Judicial Council opinion on the ethical responsibilities of physicians regarding abuse of children, elderly persons, and others at risk;
- Approved ethical guidelines for physicians engaged in accreditation activities;
- Approved advertising and labeling of alcoholic beverages.

FMA Speakers Bureau

The Report of the FMA Speakers Bureau was adopted.

FMA Speakers Bureau
Edward R. Annis, M.D., Chairman

In addressing the profession and the public, your FMA leadership has given highest priority to the matter of professional liability insurance. While there is no longer a problem of availability, the problem of affordability has gained the spotlight as jury awards have escalated rapidly coincidental to a steady and progressive increased frequency of allegations of malpractice, reaching a level where one in four Florida physicians is now subject to such claims in the course of a year.

Relief via the judiciary has not been forthcoming and similarly little assistance has been received as a result of actions taken by the organized Florida Bar. Because the ultimate jurors are the public of Florida who must bear a greater financial burden of increased hospital costs and increased physicians' fees, it has become necessary to take our case directly to the public. Only an enlightened and motivated public can stimulate their elected legislators toward reasonable and fair solutions to this vexing problem.

Though less active, a similarly growing problem is that associated with the rapid escalation of total health care costs. Most of the public is unaware that quoted total national health expenditures cover a multitude of factors including research, construction, public health, administrative and prepayment costs and the 40% of services rendered over and beyond the 60% consumed in hospital and professional medical services. While addressing this admittedly complex problem, spokesmen for your Association have emphasized that all contributing factors must be considered, but that quality and availability of care are essential elements to be in the forefront of any efforts toward achieving greater cost effectiveness in the health care delivery system.

Though official spokesmen are essential in telling medicine's story, no designated group, however talented and well meaning, can replace the effectiveness of a one-on-one interchange of ideas between doctor and his individual patient. All members are urged to acquaint themselves with the basic issues at stake and to share with their patients their desire and that of the profession as a whole that quality medical care must be made available to all who need it, when they need it, to the extent of their need, irrespective of their ability to pay. As some government regulations are withdrawn and as government cuts back on expenditures for Medicare and Medicaid, both challenges and opportunities will confront the private sector. Our story will not be told or understood unless we tell it ourselves. All physicians are encouraged to actively participate in this most important educational project.

Judicial Council

The Report of the Judicial Council was adopted.

Judicial Council
James A. Winslow Jr., M.D., Chairman

The 1983 Annual Report of the Judicial Council will summarize the major areas of activity that occupied the Council's time since the last Annual Meeting of the Florida Medical Association held in May of 1982. The Council's duties, functions and composition are specifically prescribed in Paragraph 8, Section 3 of the Florida Medical Association Bylaws.

It is the function of the Judicial Council to direct and supervise the activities of the Association which pertain to questions of medical ethics, dissension, and disputes referred to the Association for investigation and adjudication, complaints by patients

against members of the Association, and questions of membership and disciplinary action. The Judicial Council is also responsible for considering and recommending to the Board of Governors proposed county medical societies. The Bylaws of the Florida Medical Association further provide that the component county medical society shall be the basic unit for censuring, suspending, or otherwise disciplining its members. Any member subject to such action has a right to appeal to the Judicial Council in the manner prescribed in the Bylaws.

The Council receives, pursuant to this jurisdiction, numerous requests for opinions, requests for advice on bylaw changes, etc.

Since the last annual meeting of the Association, the Council has met on the following occasions: May 5, 1982; October 2, 1982; and February 26, 1983. The current membership of the Council is as follows: James A. Winslow Jr., M.D., Chairman, Tampa; Joseph H. Davis, M.D., Miami; O. Frank Agee, M.D., Gainesville; Robert J. Brennan, M.D., Ft. Lauderdale; and Maurice H. Laszlo, M.D., North Miami Beach. The Council has been staffed by John E. Thrasher, Esq., FMA Legal Counsel.

The Council's activities are summarized under the following headings:

Grievances

During the last year the Council has continued to handle routine grievances that have been presented to it, pursuant to the Bylaws of this Association. The Council maintained its procedures of allowing county medical societies to resolve these local grievances and report their findings to the individual directly and to this Council. These procedures appear to have been followed closely by the county medical societies the past year. However, it should be noted that there have been instances in which county medical societies have delayed in handling grievances presented to them. These delays are difficult to explain to the party who has filed the grievance and in some instances may result in that party taking other action. County medical societies are encouraged to review their procedures to insure that grievances are handled as expeditiously as possible. The Council, pursuant to the Bylaws of the Florida Medical Association, retains the right to withdraw these grievances from the local society, if they are not acted upon within a reasonable time. An individual may appeal a decision of a local county medical society grievance committee to the Judicial Council.

In reviewing several appeals from decisions of county medical societies relative to disciplinary action taken against physicians, the Council would make the following observations. It is essential that the county medical society not disregard the procedural safeguards enacted in their Bylaws and Constitution when considering these matters. The basic principles of a fair and objective hearing should always be afforded to the physician whose professional conduct is being reviewed. Fundamental aspects of a fair hearing are: a) a listing of the specific charges; b) adequate notice of the right to a hearing; c) the opportunity to be present and to rebut the evidence; and d) the opportunity to present a defense.

These principles apply when the hearing body is a medical society or hospital committee composed of physicians. Medical societies are urged to review their Constitution and Bylaws to insure that these documents provide for such procedural safeguards.

Review of County Medical Society Revisions to Charter and Bylaws

Pursuant to the Bylaws of the Florida Medical Association, the proposesd bylaw amendments of component county medical societies must not be in conflict with those of the Florida Medical Association. During the past year the Council has continued to review revisions and amendments to county medical society Charters and Bylaws and encourages county medical societies to timely submit these changes to the Judicial Council for review.

The Judicial Council has also considered, during the past year, petitions from two groups for proposed county medical societies.

Opinions of the Judicial Council

During the past year the Council rendered the following opinions:

Opinion 83/1: It is the opinion of the Judicial Council that an individual's freedom to select a health care provider is a prerequisite to the ethical practice of medicine and optimal patient care and any referral to a health care entity where the physician may have an economic interest should only be done on the basis of full disclosure to the patient of the physicians interest in the clinic or institute in which the patients receive care; provided further that the Council does not feel that the mere referral by such physicians would constitute intent to circumvent the law.

Opinion 83/2: It is the opinion of the Judicial Council in regard to a physician billing for supplies and materials that a physician may be reimbursed for his actual cost in providing medical services, provided he should not make an unreasonable profit on the supplies and materials furnished to the patient and further provided that costs include the overall expense of having the materials or supplies available to the patient, such as handling, storage and loss of investment income.

Opinion 83/3: It is the opinion of the Judicial Council, that if an individual has expressed a willingness to guarantee a physician's bill, that the Council would find no ethical prohibitions against such an agreement, providing the treatment is not contingent upon the signing of the agreement.

Florida Medical Foundation

The Report of the Florida Medical Foundation, with the exception of those items referred to other Reference Committees, was adopted.

Florida Medical Foundation

Eugene G. Peek Jr., M.D., President

The Florida Medical Foundation continues to play an active role in organized medicine. Members of the Board of Directors of the Foundation held their meetings in conjunction with meetings of the Florida Medical Association Board of Governors. The following is a summary of their activities:

Peer Medical Utilization Review: The Annual Report of the Council on Medical Economics, which is included in the *Delegates Handbook*, gives a detailed summary of activities of the Foundation in Peer Medical Utilization Review. Recent rulings of the United States Supreme Court have temporarily placed a hold on our peer review efforts until we receive legal clarification. Once such clarification is received and approval is given, we hope to renew our contract with Blue Cross/Blue Shield for Medicare review and the Department of Health and Rehabilitative Services for Medicaid review. (R.C. V)

Committee on Impaired Physicians: Included in the *Delegates Handbook* is a report on the impressive activities of the Committee on Impaired Physicians. This Committee is providing a tremendous service and showing outstanding results. The Foundation is continuing to work with the Committee on Impaired Physicians in its effort to raise funds to support this needed and proven program.

Emergency Medical Services Project: The Florida Medical Foundation entered into a contract in December 1981 with the Department of Health and Rehabilitative Services. Under this contract, the Foundation provided a statewide analysis of emergency medical and critical care services, both pre-hospital and

hospital, a five year plan for Florida's emergency medical services system, and medical direction of the State EMS Office. Raymond H. Alexander, M.D., did an outstanding job as the Medical Director of the project along with Peter T. Pons, M.D., who served as the Assistant Medical Director. The FMA's Committee on Emergency Medical Services, under the chairmanship of Arthur L. Trask, M.D., gave willingly of their time and talents while serving as the official steering committee for this project. The findings and recommendations of the project will be of tremendous help to policymakers and planners as together with physicians and hospitals, we work towards the implementation of the work product. The Foundation Board of Directors is proud of this cooperative effort on behalf of the people of Florida. (R.C. II)

Medical Student Loans: The Student Loan Program continues to be of concern to the Foundation. There are currently fifteen (15) loans that are delinquent amounting to $32,877.32. The administrator of the Foundation's Student Loan Program, The Florida National Bank, reports nine (9) loans have matured totaling $23,965.22 which they are having problems collecting. There are thirty-six (36) loans in the repayment status which total $44,825.48. The Foundation is making every effort to collect on the defaulted loans as well as trying to contact those physicians whose loans have matured.

At the request of the House of Delegates in 1982, the Foundation has explored ways in which the loan program might be reinstated but because of the amount of money the Foundation is obligated for as well as the unstable availability of funds in Florida and throughout the country, it is felt that it is best to continue the moratorium until such time as the Foundation's current obligations have been satisfied. (R.C. I)

Florida Medical Association Auxiliary: The Foundation would like to express appreciation to the Auxiliary for its donation in excess of $4,000 in 1982.

Committee on Continuing Medical Education: The Committee, as an organization accredited by the Accreditation Council for Continuing Medical Education and the Florida Medical Association, continues to make a major contribution to CME in Florida. In 1982, the Committee approved 23 applications from specialty groups, hospitals and other CME providers for a total of 343 hours of Category I credit. Under the able leadership of Robert H. Threlkel, M.D., the Committee continues to assure that there are available quality continuing medical education programs easily accessible to FMA members. (R.C. I)

Committee on Impaired Physicians

The Reference Committee stated their personal expression of appreciation to Dr. Dolores Morgan for her efforts and accomplishments in working with the Impaired Physicians Program since its inception.

The Report of the Committee on Impaired Physicians was adopted.

Committee on Impaired Physicians

Guy T. Selander, M.D., Chairman

The FMA/FMF Impaired Physicians Program has entered its third year, with 107 physicians and other health care professionals having been referred for evaluation up to February 1, 1983.

The program now has six graduates who have been free of alcohol and/or drugs for more than two years, and seven others with at least 18 months of sobriety.

Ninety-three medical doctors have been referred to the program. At the request of the Florida Department of Professional Regulation, six dentists, five pharmacists, two osteopaths and one veterinarian also have been evaluated and treated if indicated.

Of the 93 M.D.'s, 68 (73%) were enrolled in treatment programs. Seven (7.5%) were found to have a problem and were reported to the Department of Professional Regulation when they refused treatment. Fifteen (16%) were referred for outpatient referral, and three were found not to have a drug/alcohol problem.

Thirty-seven of the 68 physicians accepting treatment were enrolled in programs lasting four months or longer. In this group, treatment was unsuccessful in five cases, and there were four relapses. Three of the relapse cases received additional treatment and each now has more than one year sobriety. One was reported to DPR.

Thirty-one of the treatment group of 68 received two months or less of treatment. In this group, two physicians refused to complete the program and four others relapsed.

Your Committee is pleased with the results of the program to date, particularly in view of the fact that treatment activities have had to share attention with organizational and educational matters. Then too, the program's Medical Director, a key individual in the operation of the program, is engaged only on a part-time basis.

Since not all county medical societies even now have active, informed impaired physician committees; since the matter of confidentiality continues to disturb many people, and since public opinion still attaches a stigma to chemical addiction, much work needs to be done in the area of casefinding. The Committee believes that in addition to those physicians who have interfaced with our program to date there are untold numbers of others — and their families — needlessly suffering the consequences of their disease.

If a full-time medical director were employed, he would be able to devote some time to expanding and refining the casefinding system. While the FMA and FMF have been most generous so far in both their financial and moral support for the program, an even greater commitment is necessary to bring this important activity to peak performance.

Your Committee has suggested in the past that an annual membership assessment be enacted and the proceeds be earmarked for the Impaired Physicians Program. This, of course, is but one approach.

In mid-1982, the Medical Society of New Jersey was able to employ a full-time medical director on the basis of grants by the state hospital association, the state physician-owned malpractice insurance company and the state medical society itself.

Two other approaches are discussed in Items 1 and 2, below.

Following is a categorical summary of the activities of the Committee since May 1982.

1. **Florida Board of Medical Examiners:** During the 1982 Session of the Florida Legislature, the FMA was instrumental in securing an appropriation of $150,000 to the Board of Medical Examiners for development of an impaired physicians program. FMA had envisioned supplying to the Board by contract the services of the existing impaired physicians program.

 FMA and other groups were represented on the Board of Medical Examiners' Impaired Physician Advisory Committee. It soon became apparent that the Board of Medical Examiners was intent on an entirely different approach, and it became equally clear there was no ground for compromise. Because of these unfortunate developments, the FMA Board of Governors, in the summer of 1982, ordered withdrawal of FMA participation on the Advisory Committee. However, in recent weeks, FMA has rejoined the discussions at the request of Board of Medical Examiners officials.
2. **Interprofessional Program:** The Committee has been conducting discussions with other professional groups regarding the possible development of an inter-organizational impaired professional program. The general idea is to share the cost pro-rata on the basis of membership of the participating organizations. There has been considerable interest on the

part of the Florida Osteopathic Medical Association and the Florida Veterinary Medical Association. The interest of the Florida Dental Association has waxed and waned.

3. **Workshop on Intervention:** The Committee sponsored its third Workshop on Intervention with Impaired Physicians on November 6-7, 1982, in Tallahassee. Attendance exceeded the limit that had been placed on registration.
4. **Section on Chemical Dependency:** For the third consecutive year, the Committee will sponsor a Scientific Section on Chemical Dependency at the FMA Annual Meeting. The program will be conducted from 8:00 a.m. to 10:45 a.m. on Friday, May 6, and all physicians and guests registered for the Annual Meeting are invited to attend.
5. **Educational Program:** Members of the Committee, particularly the Chairman and the Medical Director, have filled several additional speaking engagements at meetings of county medical societies, hospital staffs and other groups.
6. **Confidentiality:** For the past two years, the Committee and the Florida Department of Professional Regulation have been working under sort of a "gentlemen's agreement" on the question of confidentiality. A former Secretary of DPR had agreed that licensed physicians would not be required to report to DPR and the Board of Medical Examiners other physicians who in their opinion are impaired by chemical addiction, provided the impaired physicians are enrolled in an approved treatment program and are not otherwise in violation of the Medical Practice Act.

 DPR and BME representatives have become increasingly uncomfortable with this arrangement and suggested that legislation be developed to cover the problem. Accordingly, FMA and the Florida Psychiatric Society cooperated in the development of protective legislation to be presented to the 1983 Legislature.
7. **Financial Assistance for Impaired Physicians:** The Committee recognizes that chemical addiction can lead to financial hardship for even affluent physicians. Treatment, which is expensive in itself, may require several weeks during which the physician cannot generate income. The expenses of maintaining his office and of providing for his family continue just the same.

 Your Committee has three basic interests in this area. First, it continues to solicit funds for a loan program under which a physician can obtain a loan to offset part of the cost of his treatment.

 Second, the Committee recognizes addiction as an illness and believes it should be treated no differently from any other illness under health insurance and other insurance policies.

 Third, the Committee has recommended to the Board of Governors that impaired physicians be excused from the payment of FMA dues from the time they enter approved treatment programs until six months after completion of treatment.

Florida Physicians Association

The Report of the Florida Physicians Association and the Supplemental Report was adopted.

Florida Physicians Association
David T. Overbey, M.D., President

The Florida Physicians Association is a non-profit corporation founded in December 1972 to protect the private practice of medicine by becoming involved in activities that the FMA could not enter into because of charter restrictions and legal ramifications which, if pursued, might lead to possible financial damage.

The Florida Physicians Association Board of Directors voted an increase in annual membership dues from $15 yo $20 in 1982. The additional $5 has been placed in a special fund designed to assist county medical societies with special problems, as approved by the Florida Physicians Association Board of Directors.

The Board is currently considering a request from the Florida Medical Association Board of Governors that support be offered to county medical societies in fighting deceptive advertising or other questionable activities used to solicit or promote the enrollment of patients in HMOs including use of public funds to promote the use of HMOs over other forms of health care delivery.

We are pleased to report that the membership in the FPA has increased from 3,190 in 1971 to 3,408 and that FPA stands ready should a situation occur that needs its special attention.



Guy T. Selander, M.D., of Jacksonville, presides at a meeting of the Committee on Impaired Physicians during the Annual Meeting. Left to right: John Butcher, M.D., Sarasota; Mrs. Sharon Lang, Recorder; Dr. Selander; Dolores A. Morgan, M.D., Miami; George S. Palmer, M.D., Tallahassee; and Mrs. B. David (Edie) Epstein, Key Biscayne.

Supplemental Report
Florida Physicians Association

Florida Physicians Association: Congressional redistricting of Florida created a barrier to the election of FPA Board members. Many of the current Board members whose terms have yet to expire are, because of redistricting, now living in a different district than the one from which they were originally elected. Also, redistricting has added new districts and changed the boundaries of old ones causing some counties to be split between two new districts. It has also been difficult to accurately determine the current congressional districts of FPA members which is necessary if they are to vote for Board members.

The FPA Board will consider at their meeting on Thursday, May 5, 1983, recommended changes in the Bylaws designed to resolve the current situation, and eliminate similar problems when the next congressional redistricting occurs.

RESOLUTION 83-1
Loans for Treatment of Impaired Physicians

Dade County Medical Association

The motion of the Reference Committee that Resolution 83-1 be referred to the Board of Governors carried.

RESOLUTION 83-1
Loans for Treatment of Impaired Physicians

[Not Adopted — Referred to the Board of Governors]

Whereas, The Florida Medical Association's Impaired Physician Program has been most successful and has served as a model for similar programs in other states; and

Whereas, The treatment under this program can often be beyond the limited financial resources of an impaired physician; and

Whereas, Traditional avenues of financial assistance may not be available to the impaired physician; therefore be it

RESOLVED, That the Board of Governors develop a mechanism by which the Florida Medical Association and/or the Florida Medical Foundation can serve as guarantors with local banking institutions to make loans available to members for the treatment of impaired physicians.

RESOLUTION 83-2
Director for FMA Impaired Physicians Program

Dade County Medical Association

Resolution 83-2 was adopted.

RESOLUTION 83-2
Director for FMA Impaired Physicians Program

RESOLVED, That the Florida Medical Association seek, through all available sources, sufficient funding to employ a permanent physician director for its Impaired Physicians Program.

RESOLUTION 83-3
Restoration of Coverage for Mental and Nervous Disorders

Dade County Medical Association

RESOLUTION 83-4
Coverage for Addictive Diseases

Dade County Medical Association

RESOLUTION 83-8
FMIT Psychiatric Benefits

Dade County Medical Association

The Reference Committee considered Resolutions 83-3, 83-4 and 83-8 together because they dealt with a similar subject.

The motion of the Reference Committee that Resolutions 83-3, 83-4 and 83-8 be referred to the Board of Governors for immediate consultation with the Florida Psychiatric Council for appropriate changes in coverage where reasonable, practical and actuarially sound carried.

RESOLUTION 83-3
Restoration of Coverage for Mental and Nervous Disorders

[Not Adopted — Referred to the Board of Governors]

Whereas, The Florida Medical Insurance Trust (FMIT) was established to provide medical insurance benefits for members of the Florida Medical Association, their families and employees; and

Whereas, Mental and nervous disorders are recognized medical illnesses which potentially affect the medical family to the same degree as others in society; and

Whereas, Benefits in FMIT for mental and nervous disorders have been drastically reduced which could adversely affect physician members, their families and employees; and

Whereas, The Council on Specialty Medicine has urged the Board of Governors to investigate the restoration of coverage for mental and nervous disorders; therefore be it

RESOLVED, That insurance benefits under FMIT for mental and nervous disorders be restored to the extent of the coverage previously offered by FMIT.

RESOLUTION 83-4
Coverage for Addictive Diseases

[Not Adopted — Referred to the Board of Governors]

Whereas, The Florida Medical Insurance Trust (FMIT) was established to provide medical insurance benefits for members of the Florida Medical Association, their families and employees; and

Whereas, Alcoholism and other addictive diseases are recognized medical illnesses which potentially affect the medical family to the same degree as others in society; and

Whereas, Recent studies have shown that treatment of physicians with alcoholism and other addictive diseases has been successful; therefore be it

RESOLVED, That the Board of Governors urge the FMIT to provide medical benefits for alcoholism and other addictive diseases.

RESOLUTION 83-8
FMIT Psychiatric Benefits

[Not Adopted — Referred to the Board of Governors]

Whereas, The FMIT medical insurance was taken with the promise that coverage would be equal to that of the old Blue Cross/Blue Shield policy; and

Whereas, The Board of Governors on recommendation of the FMIT and FMA staff has drastically curtailed psychiatric benefits under this policy; and

Whereas, This was done with no official consultation with the specialty group; and

Whereas, Repeated requests for the appropriate data have gone unanswered; and

Whereas, This policy is in direct opposition to the AMA policy of equal coverage; therefore be it

RESOLVED, That the Board of Governors be instructed to immediately put psychiatric benefits at the point they were in May, 1982; and be it further

RESOLVED, That the FMIT be ordered to produce **all** the data in this matter for the scrutiny of **any** interested FMA members; and be it further

RESOLVED, That the Florida Council of District Branches of the American Psychiatric Association be consulted **before** there are any further changes in psychiatric coverage in insurance covering members of the FMA.

RESOLUTION 83-10
PIMCO Review Committee

Lee County Medical Society

The Reference Committee moved an amendment to Resolution 83-10 by changing the "Resolved" to read:

"RESOLVED, That the review committee setup by the Florida Medical Association and its component medical societies to review appeals be composed of peers of the same specialty as the insured, where practical, when the Florida Physicians' Insurance Reciprocal chooses to settle a claim and the insured objects to such settlement."

The motion to adopt the amendment carried and Resolution 83-10 was adopted as amended.

RESOLUTION 83-10
PIMCO Review Committee

RESOLVED, That the review committee setup by the Florida Medical Association and its component medical societies to review appeals be composed of peers of the same specialty as the insured, where practical, when the Florida Physicians' Insurance Reciprocal chooses to settle a claim and the insured objects to such settlement.

RESOLUTION 83-11
The Committee on Relative Value Studies

Lee County Medical Society

The Reference Committee felt that because the present FMA Bylaws require that the Committee on Relative Value Studies consult with the Council on Specialty Medicine prior to publishing the Relative Value Studies, that Resolution 83-11 not be adopted.

RESOLUTION 83-12
FMA Board Meetings

Broward County Medical Association

Resolution 83-12 was not adopted.

RESOLUTION 83-13
FMA President's Compensation

Broward County Medical Association

A substitute for Resolution 83-13 was offered by the Reference Committee and its adoption moved. The motion carried and Substitute Resolution 83-13 was adopted.

SUBSTITUTE RESOLUTION 83-13
FMA President's Compensation

RESOLVED, That the Board of Governors review the reimbursement policies for the President of the FMA to reflect adequate compensation for time away from his practice.

RESOLUTION 83-16
John Gorrie, M.D.

Capital Medical Society

Resolution 83-16 was adopted.

RESOLUTION 83-16
John Gorrie, M.D.

RESOLVED, That the Florida Medical Association support and encourage the issuance of a commemorative postage stamp in honor of John Gorrie, M.D., inventor of artificial ice making and modern refrigeration; and be it further

RESOLVED, That this resolution be presented to the American Medical Association House of Delegates; and be it further

RESOLVED, That a copy of this resolution be sent to the Director, Office of Philatelic Affairs, Executive Function Group, in Washington, D.C.

RESOLUTION 83-17
FMIT Administration Fee

Charles S. Eytel, M.D., Delegate

Upon recommendation of the Reference Committee, Resolution 83-17 was not adopted.

RESOLUTION 83-18
Pre-Treatment Patient Agreements and Arbitration Panels

Osceola County Medical Society

Upon recommendation of the Reference Committee, Resolution 83-18 was not adopted.

RESOLUTION 83-19
"Harold S. Strasser, M.D., Good Samaritan Award"

Palm Beach County Medical Society

Resolution 83-19 was adopted.

RESOLUTION 83-19
"Harold S. Strasser, M.D., Good Samaritan Award"

RESOLVED, That the House of Delegates of the Florida Medical Association create a special annual award to be entitled the "Harold S. Strasser, M.D., Good Samaritan Award"; and be it further

RESOLVED, That the FMA present this award annually to a physician who has demonstrated exemplary humanitarian efforts on behalf of his patients and/or community.

The Chairman expressed his thanks to each member and alternate member of the Reference Committee for their diligent attention to the business of the House of Delegates. The Reference Committee also thanked James A. Winslow Jr., M.D., Chairman of the Judicial Council; W. Harold Parham, D.H.A., Executive Vice President; Donald C. Jones, Executive Director; Lori Moore, Recording Secretary; and FMA staff members for their support of the Committee, and the many members of the Association who attended the meeting and presented testimony.

The motion that the Report of Reference Committee No. III be adopted as amended carried.



Guy T. Selander, M.D., Jacksonville, tells a funny story to Kenneth C. Kiehl, M.D., of Sarasota.

The Speaker, Dr. Perry, called Dr. Robert E. Windom to come to the podium to present the Certificate of Merit and the Certificate of Appreciation as commendations for exceptional and outstanding service to the Association, to the medical profession, and to the public in accordance with the Principles of Medical Ethics. This year's recipient of the Certificate of Merit, Dr. Mark V. Barrow of Gainesville, was escorted to the podium by Dr. Charles P. Gibbs and Dr. W. Thomas Hawkins to receive his award.

CERTIFICATE OF MERIT

Mark V. Barrow, M.D.

Whereas, Mark V. Barrow, M.D., of Gainesville, Florida, has rendered exceptional service to the Florida Medical Association, organized medicine and to the public; and

Whereas, This dedicated physician was born in Pensacola, Florida, on August 10, 1935, attended the University of Florida College of Medicine and was graduated with a Doctor of Medicine degree and a Doctor of Philosophy degree in Anatomical Sciences; and

Whereas, The eminent gentleman served as Chief of Staff of North Florida Regional Hospital in 1975 and is currently on the hospital's Board of Trustees; and

Whereas, Dr. Barrow is a member of the Board of Directors of the Florida Heart Association; and

Whereas, This distinguished individual is a member of 17 professional societies and associations and is President of the Alachua County Medical Society; and

Whereas, He serves on the Board of Directors of Historic Gainesville, a society formed to encourage the restoration and preservation of historic sites in that city and is a member and past president of the University of Florida College of Medicine Alumni Association; and

Whereas, Dr. Barrow has given freely of his time and talents to the medical community and the people of the State of Florida; therefore be it

RESOLVED, That a Certificate of Merit be presented to Mark V. Barrow, M.D., as a token of the warm regard and respect that the officers, members and executive staff of the Florida Medical Association hold for the many years of outstanding service rendered by this fine gentleman.



Mark V. Barrow, M.D., Gainesville, receives from President Robert E. Windom, M.D., the Certificate of Merit, FMA's highest award.



Herbert D. Kerman, M.D., of Daytona Beach, received FMA's Certificate of Appreciation.

Dr. Barrow expressed his appreciation for this honor to his local delegation, the Alachua County Medical Society, and to his colleagues in the House.

Dr. Windom then announced the recipient of the Certificate of Appreciation, Dr. Herbert D. Kerman of Daytona Beach, and asked that he be escorted to the podium by Dr. Martin S. Feigenbaum and Dr. Alvin E. Smith.

CERTIFICATE OF APPRECIATION

Herbert D. Kerman, M.D.

Whereas, Herbert D. Kerman, M.D., of Daytona Beach, Florida, has rendered distinguished and able services to the medical profession and citizenry of Florida since 1956; and

Whereas, This dedicated physician was born in Chicago, Illinois, in 1917, attended Duke University and graduated from the Duke University School of Medicine with a medical degree; and

Whereas, This able physician joined the staff of Halifax Hospital Medical Center in Daytona Beach in 1956 as Director of Radiology and established an outstanding radiology and radiotherapy section which is in keeping with the finest standards of American medicine; and

Whereas, Dr. Kerman currently serves as the Director of the Division of Radiation Oncology at Halifax Hospital Medical Center, as Director of the Cancer Program Committee for the hospital and as medical advisor to the Hospice of Volusia; and

Whereas, Dr. Kerman has served as Chairman of the Radiology Section of the Medical Advisory Board for Project HOPE since 1969; and

Whereas, Dr. Kerman's considerable influence and drive led to the formation and development of the Foundation for Medical Care and Education and the Hospice Program at Halifax Hospital Medical Center, adding a new dimension to the medical care in Volusia County in medical education and patient care; and

Whereas, Dr. Kerman is a member of 17 medical societies and associations and has served in various leadership positions in many of these over the years; and

Whereas, He was recognized by the Volusia County Medical Society as "Physician of the Year" in 1980 and by the American Cancer Society as recipient of its Annual Florida Division Distinguished Service Award in 1981; and

Whereas, Dr. Kerman has been active in community affairs including the Museum of Arts and Sciences in Daytona Beach and the South Peninsula Planning Board; and

Whereas, Dr. Kerman has continually given of his time and talents for the enhancement of quality medical care for all citizens; therefore be it

RESOLVED, That a Certificate of Appreciation be presented by the Florida Medical Association to Herbert David Kerman, M.D., as a token of the warm appreciation that the officers, members and executive staff of the Association hold for the many years of outstanding service rendered by this fine gentleman.

Dr. Kerman thanked the members of the House, the Association, and in particular his peers in the Volusia County Medical Society for bestowing him with this award.

Dr. Dolores A. Morgan was then asked to come forward, to be escorted by Dr. Charles A. Dunn, for presentation of a Certificate commending her for faithful and untiring efforts and compassion concern in connection with her work on the Impaired Physicians Program. Dr. Morgan was deeply grateful and expressed her appreciation to her colleagues in Dade County and the Association and asked for the Association's continued support to this worthwhile program.



Dolores A. Morgan, M.D., received a certificate in recognition of her outstanding service as Medical Director of the FMA-FMF Impaired Physicians Program.

A presentation was then made to Dr. Raymond H. Alexander and Dr. Peter A. Pons for their exemplary work and dedication to the EMS Project. Although Dr. Pons could not be in attendance, Dr. Alexander expressed his and Dr. Pons' appreciation for all the support and efforts received on this important Project during the past year.

The Speaker then called to the podium Mr. Thomas D. Callahan, Vice President of Sales, for the Diplomat Hotel for presentation of a Certificate of Grateful Appreciation to the owners, management and staff of the Diplomat Hotel for all their advice and assistance rendered during the past 14 years in hosting the FMA Annual Meetings. Mr. Callahan accepted the award and thanked the Association on behalf of the Diplomat Hotel.

CERTIFICATE OF GRATEFUL APPRECIATION

RESOLVED, That the House of Delegates extend to the Diplomat Hotel owners, Marge and Irving Cowan; Executive Vice President Hal Chandler; all the operating departments; and the entire staff and management of all levels and ranks, its sincere appreciation and gratitude for all past advice, help and service;

RESOLVED, That the FMA extend to the Diplomat Hotel and its employees its most sincere best wishes for many more years of dedicated service and prosperity; and

RESOLVED, That the Diplomat Hotel and Country Club be presented with a Certificate of Grateful Appreciation on behalf of the FMA, officers, members and staff, for its many contributions to the success of the FMA Annual Meetings in the past and in anticipation of continuing the same excellent relationship in the future.



Too bad pictures are not produced in full color in The Journal. The colorful design in the dress Mrs. Robert E. Windom is wearing enhances her natural beauty.

The third meeting of the House of Delegates convened at 9:10 a.m. on Sunday, May 8, 1983, in



The smiles on these FMA Past Presidents' faces could mean they're happy not to be on the firing line. Left to right: Sanford A. Mullen, M.D., Jacksonville; Samuel M. Day, M.D., Jacksonville; H. Phillip Hampton, M.D., Tampa; and George S. Palmer, M.D., Tallahassee.

Auxiliary Photo Highlights


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(1) Mrs. LaVere G. (Mae) White receives the Peggy Wilcox Award from Mrs. Walter (Jody) Jarrell. (2) Mrs. S. Bruce (Priscilla) Gerber, incoming President of the Auxiliary; S. Bruce Gerber, M.D.; and Mrs. Arnold (Bennie) Spanjers, a Past President of FMA-A. (3) Mr. Donald S. Fraser, Jr., (right) FMA's Director of Legislation and Public Affairs, arrives at the FLAMPAC Luncheon with guest speaker, U.S. Sen. Richard Lugar; Mrs. Daniel B. (Gloria) Nunn (center). (4) Mrs. Nunn and Mr. Jim McCloy, FMA Assistant Director of Legislative Affairs, welcome U.S. Senator Richard Lugar. (5) Mrs. Nunn and Mrs. Gerber greet FMA President and Mrs. Robert E. (Leila) Windom. (6) Mrs. B. David (Edie) Epstein, a Past President of FMA-A, chats with Mr. Russell E. Berge, Executive Director, FMA Auxiliary. (7) Mr. Donald S. Fraser, Jr., welcomes Senator Lugar.

While FMA members were engaged in their 109th Annual Meeting, their spouses were busy with the 55th Annual Meeting of the FMA Auxiliary. *The Journal's* photographer attended some of the sessions and assembled the album that begins on this page.













(8) Retiring Auxiliary President Mrs. Daniel B. (Gloria) Nunn receives roses from her children Daniel and Myra, while incoming President Mrs. S. Bruce (Priscilla) Gerber looks on. (9) Mrs. Walter (Jody) Jarrell presents a report. (10) Mrs. Gerber receives a crystal vase from John C. Moore Jr., M.D., President-Elect, Polk County Medical Society, on behalf of Polk CMS. (11) Mrs. Nunn, retiring Auxiliary President, passes the gavel to incoming President, Mrs. Gerber. (12) New officers installed by President-Elect J. Lee Dockery, M.D. (background) are: Mrs. S. Bruce (Priscilla) Gerber, incoming President; Mrs. Laurin G. (Nancy) Smith, President-Elect; Mrs. Milton (Jo) Tignor, First Vice President; Mrs. David S. (Sandee) Whittaker, NE District Vice President; Mrs. Ferdinando (Margaret) Vizzi, WC District Vice President; Mrs. John (Barbara) Freeman, SW District Vice President; and Mrs. Arthur F. (Jane) Eberly, S. District Vice President. (13) JFMA Editor Daniel B. Nunn, M.D., with the assistance of Mrs. Nunn shows the Auxiliary the winner of the Editor's Award in the Auxiliary Art Show.



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(14) Mrs. Gerber receives roses and champagne from a Past President, Mrs. Arnold J. (Bennie) Spanjers of Winter Haven, on behalf of Polk County Medical Society. (15) Mrs. Nunn and daugher Myra enjoy a cup of coffee during a convention break. (16) Mrs. Frank C. (Ruth) Coleman, immediate Past President of the Auxiliary, affixes the Past President's pin on the blouse of retiring President Mrs. Daniel B. (Gloria) Nunn. (17) Daniel B. Nunn, M.D., spouse of outgoing President, Mrs. Gloria Nunn, receives a pin from Mrs. Ruth Coleman. (18) Mrs. Nunn chats with Mrs. Coleman. (19) Mrs. Nunn assists J. Lee Dockery, M.D., FMA President-Elect, with the Speaker's podium. (20) Mrs. Nunn pins incoming Auxiliary President Mrs. Gerber.


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Editor's Dinner















Editors of *The Journal* assembled on Wednesday evening for their annual banquet. JFMA Editor Daniel B. Nunn, M.D. presided at the gathering. *The Journal's* photographer was there and caught these shots.

(1) JFMA Editor Daniel B. Nunn, M.D., (right) presents a bound volume of 1982 issues of the JFMA to FMA Secretary Luis M. Perez, M.D. (2) FMA Past President Sanford A. Mullen, M.D., utters words of praise for The Journal. (3) Dr. Nunn displays a blow-up of a Journal cover by Cover Editor Andre J. Renard, M.D. to the assemblage. Seated: (left to right) Book Review Editor F. Norman Vickers, M.D.; Associate Editor E. Charlton Prather, M.D.; Mrs. Vickers; and Mr. Edward D. Hagan, Director of the FMA Department of Communication. (4) Dr. Nunn presents to Associate Editor E. Charlton Prather, M.D., bound issues of JFMA. (5) Assistant JFMA Editor Lee A. Fischer, M.D., of West Palm Beach, receives bound Journal volumes from Dr. Nunn. (6) Associate Editor Clyde M. Collins, M.D., Jacksonville, receives bound Journals from Dr. Nunn. (7) Among those enjoying the Editor's Dinner were JFMA Historical Editor William M. Straight, M.D., Mrs. Straight, and Mr. Ernest R. Currie, Executive Vice President of the Duval County Medical Society.

Third House of Delegates

The third meeting of the House of Delegates convened at 9:00 a.m. on Sunday, May 8, 1983, in the Regency Room North of the Diplomat Hotel, Hollywood, Florida, with the Speaker of the House, Dr. James B. Perry, presiding.

Fred S. Carter, M.D., Chairman of the Credentials Committee, reported that 225 Delegates were registered, representing 38 county societies, which constitutes a quorum, and moved that the delegates be seated. The motion carried.

Delegates

ALACHUA — O. Frank Agee, M.D.; Mark V. Barrow, M.D.; Thomas D. Bartley, M.D.; William B. Deal, M.D.; Mr. James Dolan; Charles P. Gibbs, M.D.; William T. Hawkins, M.D.; Douglas O. Jenkins, M.D.

BAY — William G. Bruce, M.D.; James T. Cook, III, M.D.; (Absent — B. Philip Cotton, M.D.)

BREVARD — Hani M. Agrama, M.D.; Raymond A. Armstrong, M.D.; Walter A. Cerrato, M.D.; Brian P. Gibbons, M.D.; Francis S. Pooser, M.D.; Paul J. Popovich, M.D.; Joseph C. Von Thron, M.D.

BROWARD — Charles H. Bechert III, M.D.; Bruce B. Burgess, M.D.; Walter Campbell, M.D.; Andre S. Capi, M.D.; David A. d'Alessandro, M.D.; Arthur L. Eberly, M.D.; Paul A. Flaten, M.D.; Stanley S. Goodman, M.D.; Richard S. Greene, M.D.; Theodore W. Hahn, M.D.; William C. Hartley, M.D.; Wilbur F. Helmus, M.D.; Thomas J. Lescher, M.D.; Alexander E. Molchan, M.D.; Jerry D. Moore, M.D.; Ray E. Murphy, Jr., M.D.; Richard F. Ott, M.D.; Ernest G. Sayfie, M.D.; John F. Shaw, M.D.; Peter A. Tomasello, M.D.; Juan S. A. Wester, M.D.; (Absent — Herbert E. Brizel, M.D.; John M. Harper, M.D.; James A. Jordan, M.D.; Richard D. Schultz, M.D.; Marvin Stein, M.D.; Herbert M. Todd, M.D.; Anthony J. Vento, M.D.)

CAPITAL — Robert P. Johnson, M.D.; Nelson H. Kraeft, M.D.; George N. Lewis, M.D.; Jack W. MacDonald, M.D.; Robert N. Webster, M.D.

CHARLOTTE — Thomas R. Civitella, M.D.; Joseph R. Goggin, M.D.; Jaime Torner, M.D.

CITRUS-HERNANDO — Wilburn R. Jenkins, M.D.; Clinton J. McGrew, M.D.

CLAY — (Absent — Clarence M. Harris, M.D.; William S. Bazley, M.D.)

COLLIER — Charles S. Eytel, M.D.; Virgil A. Ponzoli Jr., M.D.; Joseph F. Sullivan, M.D.

COLUMBIA — (ABSENT)

DADE — Duane E. Banks, M.D.; Virgilio I. Beato, M.D.; Jerome Benson, M.D.; Valentine Bloch, M.D.; Rufus K. Broadaway; John O. Brown, M.D.; Harlan S. Chiron, M.D.; Richard C. Clay, M.D.; Vincent P. Corso, M.D.; DeWitt C. Daughtry, M.D.; O. William Davenport, M.D., Joseph H. Davis, M.D.; Charles A. Dunn, M.D.; Richard J. Feinstein, M.D.; Miguel Figueroa, M.D.; N. Ralph Frankel, M.D.; M. Felix Freshwater, M.D.; Richard L. Glatzer, M.D.; Edward E. Goldman, M.D.; Ms. Ana Gonzalez; Alan S. Graubert, M.D.; Julian H. Groff, M.D.; Joseph Harris, M.D.; James J. Hutson, M.D.; Donald E. Johnson, M.D.; Sean M. Kaufman, M.D.; Norman M. Kenyon, M.D.; Jesse G. Keshin, M.D.; Maurice H. Laszlo, M.D.; Warren Lindau, M.D.; Carlos G. Llanes, M.D.; Simon E. Markovich, M.D.; Morton L. Miller, M.D.; Charles A. Monnin Jr., M.D.; Miguel A. Mora, M.D.; Dolores A. Morgan, M.D.; Sheldon D. Munach, M.D.; Joseph T. Ostroski, M.D.; Pedro A. Ramos, M.D.; Harry T. Remmer, M.D.; William I. Roth, M.D.; Oscar Sandoval, M.D.; Arnold F. Schild, M.D.; Daniel L. Seckinger, M.D.; Everett Shockett, M.D ; Margaret C. S. Skinner, M.D.; Douglas Slavin, M.D.; John C. Turner, M.D.; Osvaldo D. Valdes, M.D.; Harold H. Weiner, M.D.; Edmund K. Zahn, M.D.; Sheldon Zane, M.D.; (Absent — Robert E. Boyett, M.D.; Victor O. Calderin, M.D.; Marvin B. Slotki, M.D.; Steven M. Weissberg, M.D.; Bruce W. Weissman, M.D.; Leo White.)

DESOTO-HARDEE-GLADES — Calvin W. Martin, M.D.

DUVAL — Harvey E. Bernhardt, M.D.; Wilbert L. Dawkins, M.D.; Richard C. Dever, M.D.; William J. Garoni Jr., M.D.; Walter A. Harmon, M.D.; Charles P. Hayes, M.D.; Howard P. Hogshead, M.D.; Charles W. Lewis, M.D.; John F. Lovejoy, M.D.; Kevin M. McAuliffe, M.D.; Charles B. McIntosh, M.D.; William Z. McLear, III, M.D.; Faris S. Monsour, M.D.; James G. T. Nealis, M.D.; Daniel B. Nunn, M.D.; Guy T. Selander, M.D.; Robert H. Threlkel, M.D.; George S. Trotter M.D.; James W. Walker, M.D.; William D. Walklett, M.D.

ESCAMBIA — Richard H. Ciordia, M.D.; Charles J. Kahn, M.D.; Charles F. McConnell, M.D.; Michael R. Redmond, M.D.; F. Norman Vickers, M.D.; Robert K. Wilson Jr., M.D.

FLAGLER — John M. Canakaris, M.D.

FRANKLIN-GULF — Joseph P. Hendrix, M.D.

HIGHLANDS — Carlos J. Gonzalez, M.D.; Luis M. Pena, M.D.

HILLSBOROUGH — Richard A. Bagby, M.D.; William T. Branch, M.D.; Francis C. Coleman, M.D.; Richard G. Connar, M.D.; Emilio D. Echevarria, M.D.; Thomas H. Greiwe, M.D.; Mr. Alex Gross; Glenn S. Hooper, M.D.; Robert G. Isbell, M.D.; Victor H. Knight Jr., M.D.; Thomas E. McKell, M.D.; Robert E. McCammon, M.D.; J. Robert Qualey, M.D.; Gerald L. Stoker, M.D.; William W. Trice, M.D.; Ferdinando Vizzi, M.D.; James A. Winslow, M.D.; (Absent — Irving M. Essrig, M.D.)

INDIAN RIVER — K. Gordon Kelso, M.D.; (Absent — Donald L. Ames, M.D.; Paul A. Graham, M.D.)

LAKE — Joseph Comfort, M.D.; Robert H. Hux, M.D.; (Absent — Joseph E. Holland, M.D.)

LEE — Cecil C. Beehler, M.D.; Larry P. Garrett, M.D.; Francis L. Howington, M.D.; Joseph P. O'Bryan, M.D.; Stephen R. Zellner, M.D.; (Absent — H. Quillian Jones Jr., M D .)

MADISON — (Absent — Melvin H. Thomas, M.D.)

MANATEE — Thomas R. Busard, M.D.; David Fulghum, M.D.; Julian Giraldo, M.D.; (Absent — James T. Rogers Jr., M.D.)

MARION — Claude B. Henderson, M.D.; James L. McLaughlin, M.D.; Samuel L. Renfroe, M.D.

MARTIN — Fred S. Carter, M.D.; Andrew F. Greene, M.D.

MONROE — Ronald H. Chase, M.D.; (Absent — Robert D. Carraway, M.D.)

NASSAU — Cecil B. Brewton, M.D.

OKALOOSA — David R. Arrowsmith, M.D.; Samuel M. Atkinson Jr., M.D.

ORANGE — Edward Ackerman, M.D.; Clifford D. Bidwell, M.D.; Clarence H. Brown, III, M.D.; Manuel J. Coto, M.D.; Angelo Massaro, M.D.; Joseph G. Matthews, M.D.; Hector

R. Mendez, M.D.; Louis C. Murray, M.D.; Calvin R. Peters, M.D.; Charles D. Price, M.D.; James F. Richards Jr., M.D.; Robert N. Serros, M.D.; Edward W. Stoner, M.D.; Robert B. Trumbo, M.D.; Cecil B. Wilson, M.D.; (Absent — William E. Hoffmeister, M.D.)

OSCEOLA — Gilberto Perez, M.D.

PALM BEACH — Vernon B. Astler, M.D.; J. A. Baker, M.D.; Elizabeth J. Barice, M.D.; Richard C. Cavanagh, M.D.; John D. Corbitt Jr., M.D.; Ralph R. Eastridge, M.D.; Lee A. Fischer, M.D.; James R. Forlaw, M.D.; Luis R. Guerrero, M.D.; James M. Johnson, M.D.; V. A. Marks, M.D.; Mass Massoumi, M.D.; William J. Romanos Jr., M.D.; James F. Smith, M.D.; Dick L. Van Eldki, M.D. (Absent — Stephen N. Martyak, M.D.)

PANHANDLE — Herbert E. Brooks, M.D; (Absent — James T. Cook Jr., M.D.)

PASCO — Robert D. May, M.D; (Absent — Herman R. Reno, M.D.; Randall D. Sells, M.D.)

PINELLAS — Robert L. Dawson, M.D.; Charles K. Donegan, M.D.; John Flint, M.D.; Jose Galvez, M.D.; Roger S. Golomb, M.D.; John M. Hamilton, M.D.; K. Kay Hanley, M.D.; Donald L. Howie, M.D.; Harold L. Ishler Jr., M.D.; David Jones, M.D.; Morris J. LeVine, M.D.; Jack A. MaCris, M.D.; Donald G. Nikolaus, M.D.; Rex Orr, M.D.; David T. Overbey, M.D.; Brice P. Smith, M.D.; Walter H. Winchester, M.D.

POLK — Ray Barnes, M.D.; Thomas M. Caswall, M.D.; John W. Glotfelty, M.D.; Henry M. Haire, M.D.; Thomas E. McMicken, M.D.; John C. Moore, M.D.; Robert B. Peddy, M.D. (Absent — Ronald W. Case, M.D.)

PUTNAM — Roy E. Campbell, M.D.

ST. LUCIE - OKEECHOBEE — William H. Meyer Jr., M.D.; (Absent — Charles R. Cambron, M.D.; Dave L. Fromang, M.D.)

SANTA ROSA — D. Bruce Young, M.D.

SARASOTA — Samuel E. Kaplan, M.D.; Kenneth C. Keihl, M.D.; Martin F. Mihm, M.D.; Douglas R. Murphy, M.D.; Franklin H. Pfeiffenberger, M.D.; Richard C. Rehmeyer, M.D.; Karl R. Rolls, M.D.; David L. Thomas, M.D.

SEMINOLE — Luis M. Perez, M.D. (Absent — Orlando Garcia-Piedra, M.D.)

SUWANNEE - HAMILTON — LAFAYETTE — (Absent — Alex Kish, M.D.)

TAYLOR — (Absent — John H. Parker, M.D.)

VOLUSIA — Grandy B. Barnard, M.D.; Martin S. Feigenbaum, M.D.; Robert W. Lankford, M.D.; Alvin E. Smith, M.D.; Richard W. Snodgrass, M.D.

WALTON — James D. Lawlor, M.D.

WASHINGTON — (Absent — Sheikh M. Ilyas, M.D.)

SPEAKER — James B. Perry, M.D.

VICE SPEAKER — Franklin B. McKechnie, M.D.

Installation of the President

Dr. Perry recognized the President, Dr. Robert E. Windom, and asked that he come forward to install the new President.

Dr. Windom then presented the personal gavel, the President's plaque and the book entitled "Familiar Medical Quotations" to Dr. J. Lee Dockery, the new President.

Dr. Dockery presented Dr. Windom with the Past President's Pin and asked Mrs. Windom to come to the podium. Mrs. Windom was escorted by her sons, Bob, Ross and Hugh, to the platform where she was presented with Dr. Windom's portriat.



Pursuant to tradition, the large portrait of the President of the Florida Medical Association which has been hanging in the lobby of the FMA Headquarters for the past year is presented to the wife and family at the Annual Meeting. Obviously pleased to have Dr. Windom and his picture back are Mrs. Robert E. Windom and sons Hugh, Ross and Bob. Immediate Past President Windom and new President J. Lee Dockery, M.D., share in the happy moment.

Remarks of the President

It is impossible for me to express to you the emotion that I have within me at this time. I am filled with gratitude, humility, fear appreciation, and much more. I am grateful to my county society for their confidence in me, I am grateful to the Gator Group, and I am grateful to the man with whom I work as my colleague and friend who gave me the chance to take on this job — Dr. Deal is also my boss. I am also grateful to my family for their continued support and assistance to me in their caring way that permits me to accept this responsibility. And I thank each of you for your expression and support and commitment that lets us work and be what we are together.

I think that each of you vicariously participate in the operation of the Florida Medical Association, in the process that we enjoy. I would also like to say to you that I hope to use each of you, and others that are not represented here, in our efforts this next year to come together. I would say to you that medical malpractice is not our only problem.

Some concerns that I have and have had prior to this time, and I hope to have in this little window of chance to try to change and correct with our help. I'm concerned about the cost of health care. I am concerned that we are blamed for the cost of health care inappropriately. But, if we are not blamed inappropriately, I hope that we can correct that. I am also concerned about our image.

Last year, in Dr. Windom's address, he mentioned the "House of Medicine," and I, in my disheveled, broken emotional state, promised to help him get insurance for his "House of Medicine". And I hope that I have been partially helpful in that though that job is not accomplished as yet. But I am most importantly concerned about how we look — our image — how we are perceived. I think we are depressed, disorganized, apathetic, and sometimes hostile. If the only signal message that we are giving to our patients is that we are economically driven, then we are failing in the most basic skill of communication.

Why do we need to spend $600,000 for a public relations campaign when every patient that gives us the honor of being their physician should be happy with our care and should be pleased to have us be their physician? I think we must rededicate ourselves to the reasons that we chose the most wonderful professison that exists, not only in this country but anywhere in the world. We participate in the saga of life and death, sadness and happiness. We are really right where the action is, and if we rededicate ourselves to choosing students that go into this wonderful career to be humanitarian as well as academically prepared, then will we not rededicate ourselves to our mission? If we give every patient the kind of care that we want for ourselves and our family and we communicate in the way we should, medicine will come off the ropes.

Each one of us here can accept this baton, can accept this charge, and we can go back, and we can transfer this rededication to our colleagues and others that are not represented. We must tell our story. Please help me do that this year. Thank you very much.

Change of Command







One of the highlights of the third session of the House of Delegates was the installation of the new President, J. Lee Dockery, M.D. The first step (top) was the presentation of the gavel and the President's plaque by outgoing President Robert E. Windom, M.D. to Dr. Dockery. Dr. Dockery reciprocated by presenting Dr. Windom with his Past President's Pin (lower left). Dr. Dockery then presented the Remarks of the President (lower right).

Report of Reference Committee No. IV Legislation and Miscellaneous

Dr. Perry called the Chairman and members of Reference Committee No. IV, Legislation and Miscellaneous, to present their report.

Dr. Brian P. Gibbons, Chairman, and his Committee came forward to present the report of Reference Committee No. IV, Legislation and Miscellaneous.

The Reference Committee considered the items referred to it and heard testimony from members of the Florida Medical Association about them. The information given to the Committee by Mr. Jim McCloy, Assistant Director of Legislative Affairs of the FMA Capital Office, was particularly helpful and enlightening.

The Committee commended Dr. Louis C. Murray, for his outstanding work in his role as Chairman of this Council, Dr. Frank C. Coleman, Chairman, Committee on National Legislation, and Dr. James G. White, Chairman, Committee on State Legislation. The Committee further recognized and commended Mr. Donald S. Fraser, Jr., Director of Legislative Affairs, Mr. Jim McCloy, Assistant Director of Legislative Affairs, Mrs. Nancy Moreau, Legislative Analyst of the FMA Capital Office, and all other FMA staff members who have worked on our legislative program for their outstanding service. The Committee also recognized the contributions of all members of the Florida Medical Association who have participated in FMA legislative activities during the past year.

Report D of the Board of Governors

The motion of the Reference Committee carried to delete the words "in treating disease" in the first item under "Opposition to".

The motion of the Reference Committee that Report D of the Board of Governors be adopted as amended carried.

Report D of the Board of Governors

Robert E. Windom, M.D., Chairman

Board Actions of Major Importance

FLAMPAC

Membership — The Board expressed its sincere appreciation and commendations to those who worked hard in developing the FLAMPAC membership to a new all-time high during 1982. The Board urged continued efforts to expand the interest of physicians and their spouses in FLAMPAC and the political process.

1982 Election Results — The Board recognized the hard work of the many physicians and their spouses on the local level. FLAMPAC supported the winners in 76.5% of the races where it participated. The record in support of incumbent state legislators was particularly noteworthy since the election following reapportionment usually sees large numbers of incumbents defeated.



Brian P. Gibbons, M.D., Cocoa Beach, was Chairman of Reference Committee IV (Legislation and Miscellaneous). Left to right: Thomas R. Busard, M.D., Bradenton; Kenneth C. Kiehl, M.D., Sarasota; Robert H. Threlkel, M.D., Jacksonville; Mrs. Sharon Lang, Recorder; Dr. Gibbons; Arnold F. Schild, M.D., Miami; and Alvin E. Smith, M.D., Ormond Beach.

FLAMPAC was on the winning side of 62 races involving incumbents and lost only 10. In General Election races for Congress, FLAMPAC supported 15 candidates and was on the winning side in all these races; also, FLAMPAC supported the winning candidates in all of the newly created Congressional seats.

FLAMPAC District Representative Appointments for 1983-1984 — The Board approved the recommended appointments by FLAMPAC as District Representatives for 1983-84.

FLAMPAC Officers — The Board noted the election of the following FLAMPAC officers:

President	Robert E. Windom, M.D.
Vice President	James G. White, M.D.
Secretary	Carlos G. Llanes, M.D.
Treasurer	Louis C. Murray, M.D.
Assistant Treasurer	John E. Thrasher, Esq.

FMA Councils and Committees

COUNCIL ON LEGISLATION

1982 Legislative Session — The Board expressed commendations to the members of the Committee on State Legislation, members of the FMA Auxiliary and the many physicians who helped to achieve the FMA objectives during the 1982 Legislative Session.

Legislative proposals which FMA opposed that were defeated included:

- Licensure of homeopathic physicians (HB 140, SB 621).
- State funding of HSA's (SB 683, HB 211).
- Bringing hospital-based physicians under the jurisdiction of the Hospital Cost Containment Board.
- Establishment of coalitions for competition in health care to replace HSAs.
- Mandatory disclosure of financial interests in health care facilities (HB 733, SB 380).
- Optometry drug bill (HB 909, SB 901).
- Hospital staff privileges for chiropractors.
- State takeover of county health departments.

Legislative proposals which were priority issues supported by the FMA that passed include:

- Physician supervision of Advanced Registered Nurse Practitioners in the performance of medical acts (CS/CS/HB 239).
- Local Health Council legislation and reenactment of the Hospital Licensure Law (Chapter 395, Part I) and the Florida Hospital Cost Containment Board (Chapter 395, Part II); (CS/HB 931).
- Vehicle seat restraint devices for infants four years of age and younger (CS/SB 298).
- Food, Drug and Cosmetic Act, revising Chapter 500 passed on April 7th during the sixth special session.
- Reenactment and revision of the Florida Insurance Code passed during the sixth special session.

Other significant issues on which FMA positions were sustained include:

- Rewrite of the licensure law for physical therapists (SB 234, HB 538).
- Opposition to granting automatic hospital privileges to all licensed physicians (HB 830).
- Opposition to lowering education requirements for licensure of marriage and family therapists (HB 300).
- Opposition to hospital licensing based on degree of cross-subsidization (HB 792).
- Support of recruitment of family doctors for medically underserved areas (HB 1024).
- Maintain sales tax exemption for professional services
- Authorization for treatment of minors without parental consent who are victims of sexual battery (SB 622, HB 755)
- Authorization for pharmacists to fill prescriptions from outside Florida (SB 759, HB 865).
- Immunity for physicians, nurses and others in reporting excessive prisoner abuse (HB 1086)

In addition, there was a major rewrite of the insurance code which resulted in many technical and editorial changes to bring the 1959 insurance code up-to-date. These revisions were necessitated by over twenty years of changes in both the insurance industry and the economic climate of the state. An outline of the key changes are as follows:

Disability Certification by Chiropractors

- No determination of disability shall be rejected solely on the basis of a physician's practice act and scope of practice. The carrier has the option to seek a second physician's opinion prior to paying additional benefits.

Optional Coverage for Chiropractic Services

- Retains current law which states coverage for chiropractic services can be provided, if requested by the insured or subscriber under an individual policy or by the subscriber under a master policy, at an additional premium

Direct Payment to Hospitals

- Continues policy of allowing direct payment of benefits to any recognized hospital or physician.

Coverage of Newborn Children

- Provides that health insurance benefits applicable for children shall be payable with respect to a newborn child of the insured subscriber from the moment of birth.

Standard Health Claim Form

- The Department of Insurance shall prescribe a claim form to be used by all hospitals, physicians, dentists and pharmacists. Attachments are allowed except for filing Medicaid claims. The claim form shall be accepted by all insurers and all agencies, departments and divisions of the state.

Comprehensive Health Association Act

- Comprehensive health insurance is made available to citizens of Florida.
- It provides major medical coverage for persons unable to purchase insurance at 150% of the average standard risk rates.
- Annual deductibles of $1,000, $1,500 or $2,000 are made available.
- Major medical coverage is provided up to a $500,000 lifetime limit.
- All health insurance companies operating in Florida must participate in the cost of administering and operating the plan.
- As an option, the plan shall make available, at an additional premium, coverage for services provided by a chiropractor
- The requirements of the plan will become available on July 1, 1983.
- The first policies will be available on July 1, 1983.

Optional Coverage for Mental and Nervous Disorders

- All group health insurance programs must make available as part of the application and at an additional premium coverage for mental and nervous disorders.
- The benefit levels are raised to $1,000 and coverage is extended to partial hospitalization.
- Treatment by physicians and licensed psychologists, and any other mental health professionals as defined in the policy, is covered

Optional Coverage for Alcoholism and Drug Dependency

- This coverage is expanded to include drug dependency.
- Payment of benefits apply only if treatment is provided by a physician or licensed psychologist.
- The per visit rate is raised from $25 to $35.

Automobile No Fault

- Eighty percent of all reasonable expenses for necessary medical, surgical, x-ray, dental and rehabilitative services, including prosthetic devices and necessary ambulance, hospital and nursing services are paid.

Reciprocal Insurers

- New section allows for creation of limited reciprocals.
- Any group of two to 250 persons may form a limited reciprocal insurer for the purpose of pooling and spreading liabilities of its group's members in any commercial property or casualty risk.

Nonprofit Health Care Service Plans

- Changed name from Hospital and Medical Service Plans.
- Allows for mutualization of nonprofit health care service plans.
- At least a majority of the directors shall be representatives of the general public and not of the health or insurance industries.

Health Maintenance Organizations

- Must have a minimum of $100,000 working capital.
- For an additional premium, the HMO shall make available according to its standards and procedures physician care provided by a chiropractor, osteopath or podiatrist.
- Any person damaged by a breach of a subscriber contract may bring a civil action against that person.

Patient's Compensation Fund Modified

- The efforts to rewrite the Florida Insurance Code included several changes to the Patient's Compensation Fund. Key issues of interest to FMA members are:

1. Limited liability coverage of $5,000,000 or $10,000,000 will be offered by the PCF.
2. The PCF shall not be responsible for payment of punitive damages awarded for damages by health care providers.
3. The $100,000 limitation of liability schedule is increased:
 - to $150,000, July 1, 1983
 - to $200,000, July 1, 1986
 - to $250,000, July 1, 1989
4. The $15,000,000 cap is removed.
5. The PCF fees shall be based on three instead of two geographical areas.
6. The PCF fees shall be based on five categories of practice instead of three.
7. The PCF may adjust fees on an individual member basis to reflect the claims experience of such member.
8. Assessments cannot exceed two times the original fee.
9. The PCF can borrow between years.
10. Risk management is required for institutions covered by the PCF.

1983 Legislative Session — The Board reaffirmed professional liability reform as the Association's number one legislative priority during the 1983 Legislative Session. The following is a summary of FMA legislative priorities during the 1983 session. Additional information on legislative issues will be summarized in a supplemental report of the Council on Legislation which will be included in the delegates' notebook.

Support for Legislation:

- Sponsor legislation to mandate statutory periodic payment of all future economic damages such as hospital and medical bills, loss of earnings or earning capacity and attorneys' fees, with the reverter of unexpended funds for medical expenses to the party paying these expenses should the claimant die or some other event occur where funding is no longer necessary, prior to the termination of the period of years during which such payments are to be made, and that these provisions be applicable to all personal injury cases.
- Sponsor legislation to transfer punitive damage allegations from civil litigation cases to the criminal court system with damages payable to the state of Florida.
- Sponsor legislation to remove joint and several liability in personal injury cases.
- Sponsor legislation to limit attorneys' fees (pursuant to the New Jersey Supreme Court Schedule) based upon the amount of recovery in civil litigation.
- Sponsor legislation to establish a mandatory statutory limitation ($250,000) on recovery of damages for pain and suffering and other non-economic losses: mental anguish, loss of capacity for enjoyment of life, etc., that would be applicable to all personal injury cases.
- Sponsor legislation to establish a statutory provision regarding the application of the summary judgment procedure in all civil cases.
- Sponsor legislation to strengthen existing statutes relative to remittitur-additur requiring the trial judges to reduce or increase a jury award when it is excessive or inadequate.
- Support the Sunset of the Clinical Laboratory Act because of the extensive number of federal laws and rules already regulating clinical labs.
- Support changes in the Handicapped Parking Law.
- Support legislation to raise the legal drinking age in Florida to 21.
- Sponsor legislation similar to the AMA Model Clean Indoor Air Act.
- Support repeal of the statute which requires physicians to state whether they do or do not accept Medicare Assignment when they renew their medical licenses.
- Support impaired physicians' confidentiality legislation.
- Support legislation requiring the Division of Workers' Compensation to reimburse physicians based on usual and customary.

Opposition to:

- The use of prescribed drugs by optometrists.

- Access to hospital staff privileges, hospital outpatient facilities or services by chiropractors.
- Mandatory inclusion of chiropractic services in HMOs or self-insurance programs.
- Access to hospital outpatient diagnostic facilities by chiropractors.
- Statutory recognition for chiropractors to certify disability of patients on equal status to M.D.'s and D.O.'s.
- Making Hospital Cost Containment Board rate regulatory or including physicians under their jurisdiction.
- The charge of a "user fee" to physicians for use of hospital equipment.
- Funding for School of Optometry.
- Licensure of homeopathic physicians.
- Separate licensure for Medical Doctors and Doctors of Osteopathy desiring to practice as homeopathic physicians.
- Licensure of naturopathic physicians.
- Mandatory insurance coverage for chiropractors.
- Mandatory insurance coverage for services rendered by a psychologist.
- Changes in the Workers' Compensation Law which require physicians to be reimbursed solely on a negotiated fee schedule basis.
- Rewrite of the Physical Therapy Act if it is written in a way that broadens the scope of their practice and takes them out from under the prescription requirements of a physician.
- Removing the exemption from the statute of 5 or less physicians doing laboratory work in a private office setting.
- Mandated direct billing for laboratory services by independent laboratories.
- Restricting the contributions of political action committees to candidates.

EMS Project — The Board approved the sponsorship of legislation that would implement the final recommendations of the FMF/EMS Project for emergency medical services in Florida subject to approval of the final report of the EMS Project and specific legislation proposals approved by the Board of Governors.

Cost Containment — The Board recognized the need for the Association to take a leadership role in developing a comprehensive plan for Florida on the subject of health care cost containment to be submitted to the 1984 Florida Legislature.

Council on Legislation

The Report of the Council on Legislation was adopted.

Council on Legislation

Louis C. Murray, M.D., Chairman

Most of the work of the Council on Legislation is accomplished through activities of its two committees: the Committee on State Legislation and the Committee on National Legislation. The report of your Council is submitted as individual reports of the two major committees.

Committee on National Legislation

This Committee consists of the key contact physicians for each member of the Florida delegation of the U.S. Senate and the U.S. House of Representatives. Members of this Committee have kept in close touch with their assigned senators and congressmen on national legislative matters of interest to the FMA and American Medical Association. Four new congressmen have been added to Florida's Delegation, as a result of the 1982 Redistricting Plan.

The Association has maintained active liaison with members of the Florida Congressional Delegation on key legislative issues. Numerous conferences in Washington between FMA staff, key contact physicians and selected congressmen were necessary in order to carry out FMA and AMA policies on these issues. In addition to these individual visits, a comprehensive program of visitations was conducted by FMA key contact physicians and officers with the two U.S. Senators and House members who served on committees with jurisdiction over key health issues. This continuing personal liaison resulted in excellent cooperation from Florida's delegation.

The issues that necessitated major action by the FMA and contact physicians were:

- Support for efforts to phase out federal funding for PSROs and HSAs.
- Support for legislation to prohibit FTC from taking action against state-regulated professions and their organizations.
- Support for efforts to repeal the current federal legislation on HSAs and health planning.
- Opposition to federal legislation and regulations that provided different systems for reimbursement of specialties that are primarily hospital-based as compared to non-hospital practice sites.

The Ninety-Eighth Congress, 1st Session, promises to be increasingly active in federal health legislation. Among the key issues that will be considered that are of particular interest to the FMA are:

- Monitoring of federal proposals on "competition" and taking appropriate action in coordination with the AMA to defeat portions of these that would increase government regulation of the delivery of medical care.
- Continue efforts to seek legislation clarifying the lack of jurisdiction of the Federal Trade Commission over the learned professions and their state and national organizations.
- Opposition to the expansion of the use of prospective payment and D.R.G. system to specifically include physicians.
- Opposition to changes in the reimbursement mechanism to physicians in Medicare that would impose a freeze on physician fee increases or mandate acceptance of assignment as full payment for services.
- Support efforts to repeal the Health Planning and HSA Law and the PSRO Law.
- Oppose efforts to impose further regulations on the practices

This will require the Association to continue to maintain close liaison with Florida's Congressional Delegation and with the AMA Washington Office.

Committee on State Legislation

The Committee on State Legislation has had another active year with responsibilities for coordinating all state legislation for the Florida Medical Association and recognized specialty groups. Four formal meetings of the Committee have been held, along with informal conferences among Committee members as items of an urgent nature arose.

Consistent with the policies developed by the FMA House of Delegates, the Committee has worked closely with the Board of Governors in developing our legislative program for the 1983 Session of the Florida Legislature.

The following items summarize the Committee's activities:

1. The legislative program is continuing to function under the supervision of Donald S. Fraser Jr., Associate Executive Director. He has been materially assisted by Mrs. Nancy

Moreau, Legislative Analyst; George S. Palmer Jr., Assistant Director of Legislative Affairs; and Jim McCloy, Assistant Director of Legislative Affairs. Particularly helpful to the legislative activity has been the FMA Branch Offices. These have greatly increased the Association's ability to maintain liaison with county medical societies, contact physicians and members of the legislature.

2. The Capitol Dispensary. The Committee placed major emphasis on working with the Capitol Dispensary which has proven to be most important in meeting the needs of legislators and their staffs. Mrs. Linda Bass, R.N., is the new head of the clinic, and has continued to provide excellent assistance to the FMA in coordinating the activities of the Dispensary for the Doctor of the Day program.
3. The Committee on State Legislation is continuing to emphasize the need to develop a good key contact physician program in each county medical society in the state. In addition, priority attention has been directed toward increasing the role of the Auxiliary in the Association's efforts.
4 Publications. A *Legislative Bulletin* was published every week during the legislative session and periodically between sessions. The Bulletin is designed to give up-to-date information to members of the FMA who are involved in legislative activities. A listing of all bills monitored by the Capital Office is sent on a regular basis to county medical society executives and legislative chairmen. In addition, summaries and copies of key legislative proposals are distributed. Legislative manuals have been published and distributed to key physicians and Auxiliary leaders, and each key contact physician has been given a specially designed notebook for either state or national legislation.
5. 1982 Legislative Accomplishments. During the 1982 Legislative Session, there were more than 300 legislative proposals that required action by the State Legislation Committee or the Capital Office staff. Matters of major interest to the Florida Medical Association were:

Priority Issues Supported by the FMA that Passed Include:

- Physician supervision of Advanced Registered Nurse Practitioners in the performance of medical acts (CS/CS/HB 239).
- Local Health Council legislation and reenactment of the Hospital Licensure Law (Chapter 395, Part I) and the Florida Hospital Cost Containment Board (Chapter 395, Part II) (CS/HB 931).
- Vehicle seat restraint devices for infants four years of age and younger (CS/SB 298).
- Food, Drug and Cosmetic Act, revising Chapter 500, passed on April 7th during the sixth special session and will be sent to the Governor for signature.
- Continuance of statutory role of medical staff in determination of hospital privileges and discipline of staff members.

Major Issues Successfully Opposed by the FMA Include:

- Licensure of homeopathic physicians (HB 140).
- State funding of HSAs (SB 683, HB 211).
- Bringing hospital-based physicians under the jurisdiction of the Hospital Cost Containment Board.
- Establishment of coalitions for competition in health care to replace HSAs.
- Mandatory disclosure of financial interests in health care facilities (HB 733, SB 901).
- Optometry drug bill (HB 909, SB 901).
- Hospital staff privileges for chiropractors.
- State takeover of county health departments.

6. Major Legislative Priorities for the 1983 Session. The major legislative objective for the 1983 Session of the Florida Legislature, as developed by the FMA House of Delegates and the Board of Governors, is to seek passage of a package of seven tort reform proposals that relieve the current professional liability insurance crisis in Florida. These include:

 - Requirement for mandatory periodic payment of future damages (structured settlement).
 - Limitation of $250,000 on recovery of damages for pain and suffering and other non-economic losses.
 - Transfer of punitive damage allegations from civil litigation cases to criminal court system.
 - Removal of joint and several liability in personal injury cases.
 - Limitation of attorney contingent fees pursuant to a schedule based on amount of recovery in civil litigation.
 - Establishment of a statutory provision regarding application of summary judgment procedure in all civil cases.
 - Amendment to the current remittitur-additur law to clarify the original legislative intent and enable this vehicle to be used more frequently by the judiciary when it is apparent that an award is excessive or inadequate.

Other major objectives of the FMA, as of this date, for the 1983 Session of the Legislature are:

- Opposition to use and prescription of drugs by optometrists.
- Opposition to legislation giving chiropractors access to hospital outpatient diagnostic facilities.
- Opposition to licensure of homeopathic physicians.
- Opposition to removal of exemption for physicians' offices in Clinical Laboratory Act.
- Opposition to legislation to mandate use of statewide fee schedule for physician services in the Workers' Compensation program.
- Monitoring of cost containment initiatives to insure that additional government regulations are not imposed upon the health care system.

A supplemental report will be prepared by the Committee on State Legislation and distributed prior to the first session of the House of Delegates. This supplemental report will outline up-to-date progress of the FMA legislative program made during the 1983 Legislative Session. It will also include other important state legislative items which might develop prior to the FMA Annual Meeting.

Supplemental Report Council on Legislation

The Supplemental Report of the Council on Legislation was adopted.

The Commmittee reported to the House of Delegates for the information of the Board of Governors that "Discussion ensued on the floor and is offered as information to the Board of Governors that the dates of the FMA Annual Meeting be changed so as not to interfere with the Session of the Florida Legislature. The Committee suggests that the Annual Meeting, if feasible, be held prior to the convening of the Session of the Legislature to organize, in advance, efforts of interest to the FMA".

Supplementary Report
Council on Legislation

This is to update the report of the Council on Legislation printed in the *Delegates Handbook*. This supplemental report reflects the status of legislation as of April 22, 1983.

1. **Professional Liability and Tort Reform Proposals**

The FMA's seven-point tort reform package has been introduced in both the House and Senate (HB 955, SB 240). Committee hearings are in progress and floor action is anticipated shortly.

Several other bills relating to professional liability and tort reform have been introduced (all are still in committee of reference). These include:

- Review panel mechanism for professionals licensed by the Department of Professional Regulation and attorneys (HB 172, SB 296).
- Review panel mechanism for physicians and other named health care professionals (HB 320, SB 566).
- Structured settlement for medical malpractice awards over $200,000 (HB 626, SB 314).
- Repeal of statute relating to recovery of attorneys' fees by prevailing party in medical malpractice suits (SB 161).
- Proposals of Insurance Commissioner (SB 561, SB 562). These bills generally follow the report of the Insurance Commissioner to the Legislature on the professional liability issue, and contain the following major items:
 - Hospitals and ambulatory surgical centers provide professional liability coverage for anesthesiologists on staff.
 - Several sections strengthening the medical disciplinary process by:
 - Giving hospital staffs greater authority;
 - Giving stronger immunity to hospital and medical staff review committees; and
 - Mandating State Board of Medical Examiners review of physicians with two or more paid claims in a five-year period.
 - Mandates physicians to carry $150,000 professional liability insurance as condition for licensure.
 - Repeals the law on recovery of attorneys' fees.
 - Requires FMMJUA to write excess coverage.
 - Removes limit on assessments for Patient's Compensation Fund.
 - Mandates periodic payment for damages over $1,000,000, excluding general damages.
 - Requires 90-day "cooling off" period prior to filing of malpractice suit and sets up arbitration mechanism.
- Proposals for general tort reform, physicians and hospital discipline, and the Patient's Compensation Fund (SB 1017). This bill contains the following major items:
 - Provisions relating to physician discipline are similar to those in SB 562.
 - Prohibits reference to insurance coverage in civil liability actions.
 - Contains tort reform concepts similar to FMA plan on:
 - Punitive damages;
 - Attorneys' fees;
 - Structured settlement;
 - Limitation on general damages; and
 - Comparative negligence.
 - Sets up arbitration mechanism by agreement of both parties.
 - Abolishes the Patient's Compensation Fund.

2. **Other Key Issues Contained in FMA's 1983 Legislative Program as Outlined in Delegates Handbook**

- Opposition to use and prescription of drugs by optometrists (SB 168, HB 189). SB 168 is in Senate Education Committee. HB 189 is on House Calendar.
- Opposition to legislation giving chiropractors access to hospital outpatient diagnostic facilities (SB 332, HB 430). SB 332 is in Senate Health and Rehabilitative Services Committee. HB 430 is in House Health and Rehabilitative Services Committee.
- Opposition to licensure of homeopathic physicians. No bill has been filed in either House.
- Opposition to removal of exemption for physicians' offices in Clinical Laboratory Act (SB 362). SB 362 is on Senate Calendar.
- Opposition to legislation to mandate use of statewide fee schedule for physician services in the Workers' Compensation program (SB 308, HB 1103). SB 308 is in Senate Appropriations Committee. HB 1103 to be referred.

3. **Additional Major Health Legislation Filed**

a. **Rewrite of county health department statute (HB 238, SB 661).** Major revision of law which establishes Florida's county health departments; physician directors of health units retained; state-county partnership retained. HB 238 in Finance and Tax Committee. SB 661 in Health and Rehabilitative Services Committee.

b. **Authorization for chiropractors to administer food substances by other than oral methods (HB 271).** HB 271 in Health and Rehabilitative Services Committee.

c. **Authorizes chiropractors to refer patients to physical therapists (HB 286, SB 474).** HB 286 on House Calendar. SB 474 in Health and Rehabilitative Services Committee.

d. **Workers' Compensation selection of health care provider (HB 298, SB 349).** Allows employers, in Workers' Compensation cases, to recommend physicians, nurses, hospitals or other recognized practitioners to injured employees at all times. HB 298 in Judiciary Committee. SB 349 in Commerce Committee.

e. **Workers' Compensation health care provider selection (HB 332, SB 350).** Allows an injured worker freedom of choice in selecting health care providers from an employer list which must contain at least two names in each category of eligible providers. HB 332 on House Calendar. SB 350 on Senate Calendar.

f. **Chiropractor access to hospital diagnostic facilities (HB 430, SB 332).** HB 430 in Health and Rehabilitative Services Committee. SB 332 in Health and Rehabilitative Services Committee.

g. **Mandated hospital staff privileges for nurse anesthetists (HB 499, SB 576).** HB 499 in Health and Rehabilitative Services Committee. SB 576 in Health and Rehabilitative Services Committee.

h. **Medicare — Memorial to Congress (HM 528).** A memorial to Congress requesting adoption of legislation requiring physicians who treat Medicare patients to accept

assignment and charge fees which comply with Medicare standards. HM 528 in Health and Rehabilitative Services Committee.

i. **Prescription of drugs by pharmacists (HB 666).** Creates a new category of pharmacists, "pharmacy self-care consultant", who has met education, training and examination requirements and who may dispense drugs directly to the public from a formulary developed by the boards of pharmacy and medical examiners. HB 666 in Regulatory Reform Committee.

j. **Elective surgery performance records (HB 756, SB 592).** Requires hospitals to maintain and disclose to the Department of HRS and the public performance records on elective surgery performed at the facility. HB 756 in Health and Rehabilitative Services Committee. SB 592 in Health and Rehabilitative Services Committee.

k. **Workers' Compensation panel — fee schedule (HB 883, SB 450).** Changes the composition of the panel which determines the physician's fee schedule for Workers' Compensation — eliminates the state medical consultant. The panel would consist of the Insurance Commissioner and two members appointed by the Governor and confirmed by the Senate. HB 883 in Commerce Committee. SB 450 in Commerce Committee.

l. **Mandated hospital staff privileges for chiropractors (HB 951, SB 591).** HB 951 in Health and Rehabilitative Services Committee. SB 591 in Health and Rehabilitative Services Committee.

m. **Licensing lawyers (HB 990, SB 791).** Constitutional amendment to remove lawyers from exclusive jurisdiction of the Supreme Court; creates a board to regulate the practice of law. HB 990 in Judiciary Committee. SB 791 in Judiciary Committee.

n. **Maternity insurance (HB 1026, SB 492).** Requires insurance policies which provide maternity coverage to reimburse for the services of nurse midwives and lay midwives. HB 1026 in Commerce Committee. SB 492 in Commerce Committee.

o. **Workers' Compensation fee schedule (SB 308).** Requires the fee schedule for physician services in the Workers' Compensation program shall have statewide applicability and be uniform throughout the state.

p. **Patient medical records (SB 686).** Allows patient medical records to be furnished without the written consent of the patient to any person, firm or corporation which has procured or furnished such examination or treatment. In civil actions, records may be furnished when the claimant has put his mental or physical condition at issue, upon the issuance of a subpoena and notice to the patient or his legal representative. SB 686 in Health and Rehabilitative Services Committee.

q. **Limits on anesthesiologists' ability to charge his full fee for services (SB 855).** Prohibits an anesthesiologist from charging his full fee unless his is physically present throughout an entire procedure. SB 855 in Health and Rehabilitative Services Committee.

r. **University of Tampa Chiropractic College (HB 517).** Appropriates $150,000 to establish a chiropractic college at the University of Tampa. HB 517 in Higher Education Committee.

s. **Physical Therapy Practice Act rewrite (HB 879, SB 1049).** As amended by a House subcommittee, the requirement for physician prescription for physical therapy services has been changed to "referral" for such services. Also expands definition of physical therapy. HB 879 in Regulatory Reform Committee. SB 1049 to be referred.

t. **Regulation of Allied Health Personnel (PCBs 23 and 24, HB 170, SB 302).** Transfers the regulation of emergency medical services personnel, clinical laboratory personnel and hearing aid dispensers from the Department of Health and Rehabilitative Services to the Department of Professional Regulation. PCB 23 to receive bill number and referral. PCB 24 to receive bill number and referral. HB 170 in Regulatory Reform Committee. SB 302 in Economic, Community and Consumer Affairs Committee.

4. **Health Care Cost Containment**

The 1983 Session of the Florida Legislature has initiated major efforts in the area of health care costs. A significant number of bills are before committees in the House and Senate for hearings at this time. The most critical of these are:

a. Gives Hospital Cost Containment Board authority to set hospital rates. HB 880 in Health and Rehabilitative Services Committee.
b. Requires hospital staff members to pay $500, plus 2 percent of annual patient billing to the hospital to reduce the room charges for the following year. PCB 9 in House Health and Rehabilitative Services Committee.
c. Anesthesiologists prohibited from charging their full professional fee if they are not present the entire time during the administration of anesthesia. PCB 11 in House Health and Rehabilitative Services Committee.
d. Creation of peer review committees for physicians, osteopaths and chiropractors within the Department of Professional Regulation; each committee will have four of their own profession and three others. Primary purpose is for review of fees. PCB 12 in House Health and Rehabilitative Services Committee..
e. Authorizes Preferred Provider Organizations and allows insurance companies to negotiate with health care providers for alternative rates of payment. HB 209 and SB 132 are in House Commerce Committee. PCB 40 to receive formal bill number and referral. SB 132 in Senate Commerce Committee.
f. Authorizes the Hospital Cost Containment Board to develop charge data on physicians and publish lists of physicians in the lower 80 percent, and prohibits physicians in the upper 20 percent from accepting insurance assignment and requires posting of a notice. HB 881 in House Health and Rehabilitative Services Committee.

Other Late Developing Legislative Activities

The Council on Legislation asks for permission to introduce to the Reference Committee any item of major significance that might have arisen in the Legislature between April 22nd and the time of the FMA Annual Meeting.

RESOLUTION 83-26
Senate Bill 1017

Broward County Medical Association

The Reference Committee heard lengthy commentary regarding Resolution 83-26 in connection with FMA's professional liability legislative program and offered a substitute resolution. The adoption of Substitute Resolution 83-26 was moved, motion was carried and Substitute Resolution 83-26 was adopted.

SUBSTITUTE RESOLUTION 83-26
Senate Bill 1017

RESOLVED, that stationery and guidelines be provided now for a personal letter or telegram today for those that may not have had an opportunity to contact their local legislators.

The Reference Committee moved that each delegate and alternate delegate continue to serve FMA in a responsible fashion through contact with his/her local legislators requesting support for the tort reform package.

The Reference Committee moved that the FMA urge each component medical society and each hospital medical staff to immediately develop ways to increase physician awareness of the current tort reform legislative package and encourage each member to communicate with his/her legislators.

The Reference Committee moved that the Board of Governors immediately establish a reemphasis on public awareness of medical legislative issues via a variety of marketing mechanisms utilizing appropriate consultant assistance.

Dr. Windom requested permission from the Speaker to comment on legislative activities.

Dr. Windom's remarks regarding Legislation during Third House of Delegates

I want to give you a brief update on this matter of PLI and say that our Speaker's comments are certainly well received. We have, as you know, many other legislative issues and the staff is not putting them out of the picture. However, the time that they can allocate is lessened and the important thing, I think, is the fact that each specialty society become involved particularly, for example, in the ophthalmology issue. That group has put up approximately $100,000 themselves just to fight this issue last year and this year. I think it is well that other specialty groups get behind them in the same way as the fight to prevent chiropractors in the emergency room and radiology. We need everybody's individual input, whether it affects you directly or not. You all know that various specialty societies have lobbyists in Tallahassee and they work with our staff there too.

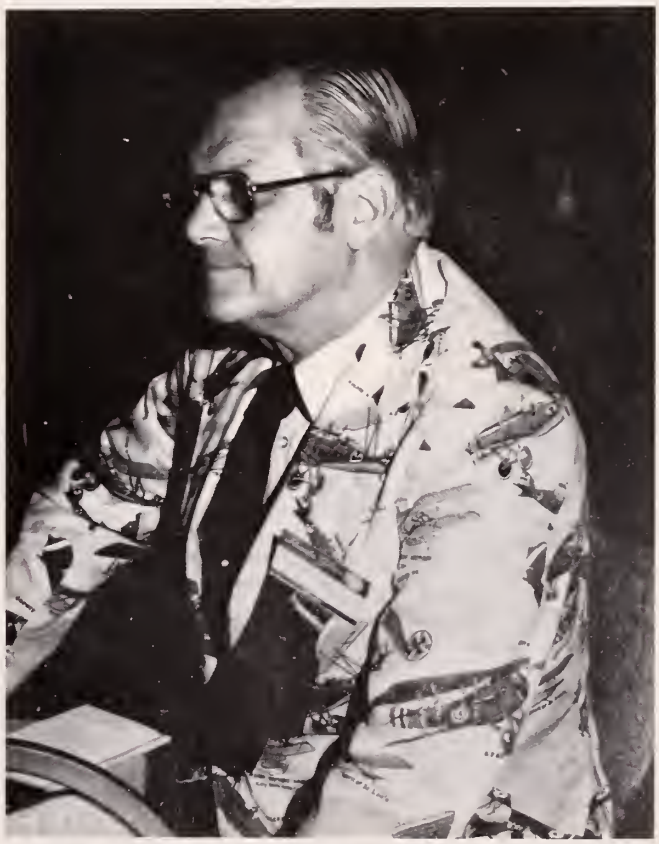
As far as the main issue on professional liability, our telecast the other night has been very well received. I just heard since we've been here that numbers of societies have already made copies of that tape. If you would like to have one to show in your hospital staff meeting or any other meeting of your group of doctors at home, call us at the Jacksonville office and they can provide you with a tape of that telecast. We had a statewide mailing and some of you have already commented this morning that you have received this letter or somebody in your community has. We targeted about 15 of the key legislative areas in the state where we felt those representatives needed to be boosted. We sent out about 200,000 letters. This came under my name only and it is not as a representative of FMA or any official position. So if somebody in your community wonders who this doctor is by the name of Windom sending this letter out, you will understand and be able to explain to them. We have had good reports already from a couple of legislators who received letters from their constituency. Within the next week or two I am sure they will be bombarded with responses from their local people. We are working in every way possible to get the word across. You know the Trial Bar is saying to us and to the people in Tallahassee that there is no crisis. As long as they keep repeating that phrase "no crisis" and we fail to show there is a crisis, then that will be the response and the people up there are not going to help us. We feel that in the Senate we received a good response so far as of last Tuesday and Wednesday and things are looking better. But the House is still very questionable, so we need those continuing letters.

I want to correct the minutes from my address on Wednesday when I mentioned a Doctor Krishnamurthy, I believe I said from Lake City. He is from Perry, Florida. Three thousand letters have already been sent from his office. He and his wife and others in the office have done this. Legislators need to be bombarded. That is the only way they are going to respond. And again, the votes are not there, so we have to do it everyday until that final vote is taken. We may just win by one vote but we have to take every chance to do that. The program is moving rapidly but we need to have everybody's help.

Thank you.

The Chairman expressed deep appreciation on behalf of the Committee to Mrs. Sharon Lang who performed so admirably as recorder for the Committee. The Chairman also thanked all members of the Association who appeared before the Committee,as well as the members of the Committee and Alternate Member, Thomas R. Busard, M.D., for their outstanding service.

The motion of the Reference Committee that the Report of Reference Committee No. IV be adopted as a whole, as amended, carried.



Eugene G. Peek Jr., M.D., of Ocala, sports one of the flashy jackets for which he is well known.

Report of Reference Committee No. V Medical Economics

Dr. Perry called the Chairman and members of Reference Committee No. V, Medical Economics, to present their report.

Dr. Charles A. Dunn, Chairman, and his committee came forward to present the report of Reference Committee No. V, Medical Economics.

Report E of the Board of Governors

During the Committee's deliberations, testimony regarding reimbursement inequities among relative values for office-based radiologists which appear in the 1982 Florida Relative Value Studies was presented. It was re-emphasized that the FMA Committee on Relative Value Studies is aware of the concerns of the Florida Radiological Society.

Workers' Compensation — After extensive discussion, agreement with the intent of this portion of Report E was acknowledged; however, concern was expressed that greater legislative emphasis by FMA should be placed on this matter.

Recommendation No. E-2 was amended as follows: Insert "foundation" between the words "the" and "concept" and "(through county medical societies)" between the words "physicians" and "and", and delete anything following "non-government programs". This amendment was adopted.

Report E of the Board of Governors, along with this amendment, was adopted as amended.

Report E of the Board of Governors

Robert E. Windom, M.D., Chairman

Board Actions of Major Importance

House of Delegates Referrals

RESOLUTION 82-7
Uniform Informed Consent Form

This resolution introduced by the Palm Beach County Medical Society was not adopted but referred to the Board of Governors. The Resolved of this resolution would provide:

RESOLVED, That the Florida Medical Association, in cooperation with the Florida Hospital Association and with legal assistance by the Florida Physicians' Insurance Reciprocal, develop a uniform informed consent form for all hospitals in the state of Florida to be used uniformly for all surgical procedures performed in the state of Florida, and which may be modified from time to time as necessary to comply with new laws.

Pursuant to the actions of the House, the Board referred this matter to the Council on Medical Economics for consideration of the most appropriate method of implementation. The Council, in cooperation with the Florida Hospital Association, has developed a uniform consent form which is currently under legal review prior to receiving final approval.

Treatment of Aphakia — The House of Delegates adopted Recommendation No. A-4 of the Board of Governors which recommended approval of a resolution submitted by the Florida Society of Ophthalmology, which reads:

RESOLVED, That new separate procedure codes pertaining to those services provided by non-medical practitioners (optometrists) for the condition of Aphakia be developed to distinguish



Reports and resolutions related to medical economics were referred to Reference Committee V. Left to right: Robert H. Hux, M.D., Leesburg; Paul A. Flaten, M.D., Fort Lauderdale; Ms. Joanelle Fulton, Recorder; Charles A. Dunn, M.D., Miami, Chairman; Faris S. Monsour, M.D., Jacksonville; and Hector R. Mendez, M.D., Orlando.

from those services provided by physician providers (ophthalmologists) for the treatment of Aphakia; and be it further

RESOLVED, That accurate descriptive terminology be developed to reflect the extent of the limited services provided by the non-medical practitioner (optometrist) for the condition of Aphakia; and be it further

RESOLVED, That the Florida Society of Ophthalmology requests that the Florida Medical Association adopt this resolution for establishment as a policy of the Florida Medical Association and take all necessary action to see that the intent of this resolution is implemented.

The House directed that the FMA take all necessary action to insure that the intent of this resolution be implemented. Therefore, the Board of Governors referred Recommendation No. A-4 to the Council on Medical Economics for implementation in cooperation with Blue Cross and Blue Shield of Florida, Inc., and other insurance carriers as appropriate. A report on the status of this resolution is included in the report of the Council on Medical Economics in this section of the *Delegates Handbook*.

FMA Councils and Committees

COUNCIL ON MEDICAL ECONOMICS

Florida Relative Value Studies — The Board received a report regarding the extensive number of procedure codes which have been added to the American Medical Association CPT-4 through the 8th and 9th updates since publication of the *1982 Florida Relative Value Studies* and authorized publication of a revised edition of the RVS to include the additional procedure codes as well as incorporating corrections to the original publication. In addition, the Board authorized that the revised edition would be based on the following guidelines:

- The revised RVS would use the same Special Services and Reports sub-headings as used in CPT-4.
- No modifiers are assigned to relative values unless there is existing supportive data.
- Each section of the revised RVS will have a comprehensive list of modifiers and special billing codes.
- There will be a clarification of the abbreviation "PC", "PS" and "TS".
- "RNE" (relative value not established) will be replaced with a relative value when a correlating procedure is determined between the 1975 RVS and CPT-4.
- All follow-up days on codes with asterisks will be removed.

The Board approved the making of a video tape to be used as an educational tool on the use of the *1982 Florida Relative Value Studies*.

Workers' Compensation — The Board expressed strong opposition to any changes in the Workers' Compensation Law which would reimburse physicians solely on a negotiated fee schedule basis and directed that if this issue is raised during the 1983 Legislative Session, the FMA would sponsor legislation to eliminate all references to a physician fee schedule in the Workers' Compensation Law and require instead that physicians be reimbursed based on prevailing fees in the community.

Hospital Staff Privileges — The Board expressed strong support of the American Medical Association's stand in opposing changes in federal hospital regulations regarding hospital staff privileges.

Tax Equity and Fiscal Responsibility Act — The Board supported the American Medical Association's opposition to the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and requested that the Council on Medical Economics carefully monitor the use of Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPOs), etc., with respect to the quality of care.

Medicaid PMUR Contract — The Board approved continuation of the contract between the Florida Medical Foundation and the Department of Health and Rehabilitative Services for peer review for Medicaid provided that the position of medical director of the Medicaid program is maintained.

The Board lifted the moratorium on peer review for Medicaid and any other entities that provide the FMA with an idemnity clause protecting any physicians, local committee, state committee and the Florida Medical Association with respect to their involvement with peer review.

CHAMPUS — The Board approved a letter to the office of CHAMPUS favoring Blue Cross and Blue Shield's bid to become the contractor for CHAMPUS in Florida.

Clean Indoor Air Act — The Board supported the American Medical Association's Clean Indoor Air Act.

Medicare Assignments — The Board supported the development of legislation to repeal Florida law which requires physicians to state whether they do or do not accept Medicare assignments when renewing their medical license.

Licensure by Endorsement — The Board requested the State Board of Medical Examiners to prohibit the issuance of medical licenses by personal endorsement in lieu of presentation of an actual degree from a medical school.

Utilization and Quality Control Review — The Board urged Florida physicians to make themselves available to their county medical societies for utilization and quality control review.

PMUR for Medicare and Health Insurance Review — The Board determined that, in light of actions by the Federal Trade Commission (FTC) and rulings of the United States Supreme Court, all peer review activities including health insurance review and Peer Medical Utilization Review be discontinued until such time as clarification is received as to the legal implication of these activities.

Alcohol and Drug Abuse Programs — The Board commended the state of Florida on its alcohol and drug abuse program and encouraged the enforcement of the laws pertaining to driving while under the influence.

Medically Needy Services — The Board expressed concern over the addition of services under the Medicaid Program without proper funding to support them.

Peer Review Organization — The Board received a report from the Council regarding the changes in Federal Law as a result of newly enacted federal PRO legislation during 1982 (Durenberger Bill). The Board discussed in-depth the current policy of the Association regarding PSROs as adopted by the House of Delegates in 1974, 1976, 1977 and 1982 which is included in the delegates notebook.

RECOMMENDATION NO. E-1

THAT THE HOUSE OF DELEGATES AUTHORIZE THE FLORIDA MEDICAL ASSOCIATION TO SUBMIT, THROUGH THE FLORIDA MEDICAL FOUNDATION, A PROPOSAL TO THE DEPARTMENT OF HEALTH AND HUMAN SERVICES BY OCTOBER 1, 1983 FOR THE FLORIDA MEDICAL FOUNDATION TO SERVE AS THE SINGLE STATEWIDE PRO IN FLORIDA UNDER THE NEWLY ENACTED FEDERAL LEGISLATION (DURENBERGER BILL).

HMO Advertising — The Board offered to support component county medical societies' efforts in fighting deceptive advertising on the questionable activities used to solicit or promote the enrollment of patients in HMOs, including use of public funds to promote the use of HMOs over other forms of health care delivery; and further, recommended the Florida Physicians Associa-

tion as the most appropriate mechanism to provide assistance to the county medical societies, assistance to be conducted through the FMA and its Legal Counsel.

Contractual Relations Between Physicians and Carriers — The Board received a report from the Council on various ways in which contractual relations have been developed between physicians and carriers. The Board recommends the following:

RECOMMENDATION NO. E-2

THAT THE HOUSE OF DELEGATES ENDORSE THE FOUNDATION CONCEPT OF CONTRACTUAL RELATIONS BETWEEN PHYSICIANS (THROUGH COUNTY MEDICAL SOCIETIES) AND CARRIERS, FOR PROVISION OF MEDICAL CARE FOR GOVERNMENT AND NON-GOVERNMENT PROGRAMS.

Current Economic Environment of the Health Care Delivery System — The Board approved the development of an audiovisual presentation describing the current economic environment of the health care delivery system, including prospective reimbursement, diagnostic related groups, preferred provider organizations, and plans of contractual relations between physicians and carriers for provision of medical care for government and management programs in order to inform component county medical societies and other interested medical organizations, and further that the format and script for the presentation be left to the discretion of the President and Executive Director.

Dual Fee Schedules — The Board reaffirmed current FMA policy adopted by the House of Delegates in opposition to specialty screens (dual fee schedules) including authorization for the Florida Medical Association, if invited, to participate on behalf of the defendant in a lawsuit filed by the Dade County Society of Internal Medicine for the purpose of defending the House's position.

Health Education Brochure — The Board authorized assistance to the South Florida Health Coalition in its efforts to establish a health education brochure for the purpose of making the consumer aware of health care issues in coordination with the Dade County Medical Association.

Use of the 1982 RVS by DHRS — The Board granted permission to the Department of Health and Rehabilitative Services to use the *1982 Florida Relative Value Studies* as a basis for its medical fee schedules.

Medicaid Reimbursement — The Board requested the Governor to restore the improvements to the Medicaid budget, including the increase in physicians' fees, recommended by the Department of Health and Rehabilitative Services.

Hospital Cost Containment Board Committee on Education — The Board concurred with the Hospital Cost Containment Board establishing a committee on education for the purpose of encouraging medical schools to include the subject of health care cost as part of their curriculum.

Florida Medical Association Priorities — The Board noted the large volume of work done by the Council this year in studying the current relationships of physicians, individually and collectively, with hospitals and other health care facilities; the improvement of relations between physicians and business health coalitions; the development of timely comments on state and federal administercd health care programs and promulgated rules and regulations; and the Council's continued effort towards establishment of a statewide Peer Medical Utilization Review program, conducted by the private sector.

The report of the Council on Medical Economics and the Supplemental Report with its attachments was adopted.

Council on Medical Economics

Charles P. Hayes Jr., M.D., Chairman

The Council on Medical Economics reviewed many important medical economic issues during the Association year. Several projects were undertaken including studies of the effect of government regulations on the cost of health care, and the Sonoma County Medical Association foundation program in California and initiation of a study on defensive medicine.

All of the committees serving under the Council on Medical Economics have been very active. The Committees on Health Care Financing and Government Programs jointly reviewed the Sonoma County Medical Association sponsored health foundation. A site visit was undertaken by Council representatives and staff, and as a result, several recommendations were forwarded to the Board of Governors for consideration.

The Committee on Relative Value Studies has been working on an update of the *1982 Florida Relative Value Studies.* The Committee on Workers' Compensation presented testimony on physician charge data supporting the establishment of a fee differential in the Workers' Compensation Fee Schedule which is under consideration by the Three Member Panel. The Committee on Peer Review Organizations monitored very closely the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) legislation that changes the peer review system, and was instrumental in recommending that the FMA be authorized to submit, through the Florida Medical Foundation, a proposal for the Foundation to serve as the single statewide PRO (Durenberger Bill). The new legislation replaces the existing PSRO's with a single statewide PRO program. The Committee on Business and Industry Relations has monitored the coalition activity in the state, and as a result, has made several recommendations toward increasing coalition activity in Florida.

In cooperation with the Florida Hospital Association and the Florida Physicians' Insurance Reciprocal, the Council is working on a uniform informed consent form for hospitals to be used uniformly for all surgical procedures performed in the state of Florida.

The Florida Society of Ophthalmology requested the FMA to look into having a separate code established pertaining to those services provided for by non-medical practitioners (optometrists) for the condition of Aphakia. As a result of the request, contact has been made with Blue Cross and Blue Shield of Florida, Inc., who, in turn, developed a new code unique to the optometry group for procedure codes under Medicare Part B for treatment of the eye condition Aphakia.

A summary of the activities of the Committees under the purview of the Council on Medical Economics is reported below:

Committee on Health Care Financing

The Committee on Health Care Financing, chaired by William J. Garoni Jr., M.D., in conjunction with the Committee on Government Programs, researched the Sonoma County Medical Association sponsored health foundation program based in Santa Rosa, California. A detailed report of their findings was prepared and presented to the FMA Board of Governors. The Committee has met twice with the key medical administrators of several major insurance companies in the state for the purpose of establishing dialogue with them about problems of common interest. These meetings have been rewarding to all participants, so plans are to continue them on a regular basis. Subjects discussed at the meetings included the effect of defensive medicine on health care costs, physician charge data, second surgical opin-

ions, business coalitions, antitrust court rulings regarding peer medical review, and problems the insurance companies are experiencing. The Committee is presently in the process of doing preliminary research for a study on the cost of defensive medicine.

Committee on Government Programs

The Committee on Government Programs, chaired by Frank B. Hodnette, M.D., monitored all state and federal legislation relating to health care programs. As mentioned previously, the Committee participated in the review of the Sonoma County Medical Association foundation program.

The Committee recommended the repeal of new DHRS rules broadening Medicaid services unless they are adequately funded, and that the FMA support legislation to repeal the requirement that physicians state whether they do or do not accept Medicaid assignment when renewing their Florida medical licenses. The Committee also recommended that the Florida Medical Association support the American Medical Association in its opposition to proposed federal law mandating that hospital staff privileges be extended to include optometrists, chiropractors, and podiatrists.

The Committee further recommended that the FMA assist county medical societies confronting problems such as those recently encountered in Dade County where an HMO was violating state advertising laws in soliciting membership. Currently, the Committee is evaluating the cost of home health care to the Medicaid Program and the problems of "Medicaid mills". Recommendations were made by the Committee to inform the membership of recent important government regulations; that the FMA request the Governor to restore the Medicaid budget, including physician reimbursement, to levels recommended by DHRS. The Committee was pleased to report the requirements for the physicians' signatures on Energy Assistance Program applications have been withdrawn.

Committee on Workers' Compensation

The Committee on Workers' Compensation, chaired by James F. Richards Jr., M.D., working with the Dade County Medical Association, presented testimony to the Three Member Panel supporting the establishment of a fee differential based upon the charge area concept. Information presented included statistical analysis of charges and an analysis of cost of purchasing "market basket" items in various parts of the state. The Three Member Panel has not made a decision and has requested additional information on the cost of practicing medicine in various parts of the state. The Committee is presently preparing this testimony. Chapter 440.13 of the Workers' Compensation Law was reviewed by the Committee, and the Committee recommended that the FMA reaffirm its position that the Workers' Compensation fee schedule pay prevailing fees in the community.

Committee on Relative Value Studies

The Committee on Relative Value Studies, chaired by Joel W. Mattison, M.D., has successfully completed the *1982 Florida Relative Value Studies*. The distribution of the relative value studies manual began in May 1982, and more than 17,000 copies have been distributed to members of the FMA and other interested parties. Presently, the Committee is developing a revision to the 1982 RVS which will include the CPT-4 Eighth and Ninth Updates. Throughout the Association year, the Committee has had numerous communications with physicians who had questions pertaining to the RVS.

Committee on Peer Review Organizations

The Committee on Peer Review Organizations, under the chairmanship of John N. Carlson, M.D., was responsible for making the recommendation that a temporary moratorium be placed on all peer review performed by the Florida Medical Foundation. This action resulted from recent U.S. Supreme Court rulings that recommendations regarding fees by peer review committees violated antitrust laws. As mentioned earlier, the Committee has recommended that the FMA be in a position to take part in the statewide Florida PRO bidding process. The Commitee recommended that the State Board of Medical Examiners prohibit the issuance of medical licenses by personal endorsement in lieu of presentation of an actual Medical Degree from an approved medical school because of abuses reported.

Committee on Business and Industry Relations

The Committee on Business and Industry Relations, chaired by Robert E. Boyett, M.D., monitored all coalition activity in the state and throughout the country. The Committee is working toward obtaining greater physician involvement in the South Florida Coalition. It has distributed surveys regarding business coalition activity in the state to all the county medical societies and is presently evaluating the results. The Committee encourages county medical societies to become involved early in any coalition activity in their areas in order to maintain a balanced network of communication between the physicians and the business community.

Supplemental Report of the Council on Medical Economics

This is to update the report of the Council on Medical Economics printed in the *House of Delegates Handbook* on cost containment, prospective reimbursement, and preferred provider organizations.

Cost Containment: On February 28, 1983, Charles P. Hayes Jr., M.D., Chairman of the Council on Medical Economics, presented comments before the Florida House of Representatives Subcommittee on Health Care Cost Containment. Factors contributing to the escalation of health care costs were discussed and several suggestions to deal with the problem were offered. These incuded educating physicians about health care costs, particularly in the hospital and in long-term care facilities; working with business and medicine coalitions to educate payors on the structure of their health care packages; determining the role of defensive medicine secondary to the professional liability problem; and the study of alternative health care delivery systems including programs similar to the Sonoma County Medical Society of California.

Prospective Reimbursement: James F. Richards Jr., M.D., Vice President and Chairman of the Committee on Workers' Compensation, presented a statement on prospective reimbursement and Diagnosis-Related Groups (DRGs) to the Florida Task Force on Competition and Consumer Choices in Health Care on January 19, 1983.

Dr. Richards stated that prospective reimbursement, a common name for various approaches for determining the amount that will be paid for service rendered in hospitals before the services are rendered, has been discussed for several years. However, there still appears to be no consensus regarding the full impact of the programs in existence on costs and quality of care. He cautioned the Task Force against instituting a radical change in the hospital reimbursement system without assurance that quality of care will be maintained and that the hospital's financial status will not be jeopardized.

In discussing DRGs, a method for measuring and categorizing a hospital's patient case mix, Dr. Richards cited probable advantages and disadvantages of the program. Although the DRG approach has potential for improving institutional management, a great deal more research and demonstration applications of different case mix measures are needed before the concept should become the basis for reimbursement of hospitals.

Preferred Provider Organizations: The Council is reviewing the Preferred Provider Organization (PPO) concept. Based on what seems to be the reaction of California physicians to California Legislation AB 3480, the so-called contracting bill, there is a great concern that the medical profession will lose its greatest assets and attractions, which are independence and freedom.

The Council cautions that it is too early for embracing or promulgating the PPO concept until we can evaluate some very important considerations, such as:

1. To what extent will there be constraints placed on physicians' professional discretion on patient management by insurers?
2. To what extent will the "gate keeper" approach place physicians in financial conflict with inherent relationships with their own patients?
3. To what extent will physicians have to function as the patient's health care policeman?
4. How will the advent of advertising reduce health care costs?

Unfortunately, there are many people in positions of responsibility who believe that PPOs represent a solution and want to implement them extensively without first evaluating the potential advantages and disadvantages on a limited trial basis. The Council is continuing to work with all interested parties in hopes of establishing pilot projects and assisting in the development of appropriate protocols.

A copy of the position papers presented on each of these issues is included in the Delegates Notebook.

Workers' Compensation: Florida's first Workers' Compensation Law was passed in 1937, and in the following year, the Florida Industrial Council sought to establish a statewide fee schedule. However after testimony presented by the FMA, it was determined that a statewide fee schedule could not be applied throughout the state. As an alternative, it was suggested that county medical societies develop local fee schedules. It has been the FMA's continued position that physicians be paid usual and customary fees for their services.

The following is a summary of the major actions that have been taken by FMA in the last ten years regarding the payment for physicians' services under the Workers' Compensation law. In 1974, the House of Delegates adopted Resolution 74-12 which called for the use of the *Florida Relative Value Studies* by the Bureau of Workmen's Compensation so that the fee schedule would reflect the most current codes, descriptors and relative values.

- In 1975, FMA petitioned the Bureau for an increase in the fee schedule. After three public hearings and a lawsuit filed by FMA, a 32 percent across-the-board increase amounting to approximately $20 million a year in the fee schedule was granted. At this time, FMA again argued unsuccessfully for a fee differential and requested that the Bureau adopt the Florida Medical Association's *Relative Value Studies*.
- In 1977-78, the Bureau of Workmen's Compensation completely converted the Workmen's Compensation Fee Schedule to the five-digit system used in the 1975 RVS, thus implementing the recommendation made by the FMA in 1974-75. Early in 1978, the FMA began plans to petition for another fee increase. The Workmen's Compensation Law was to be "sunset", with major reforms planned for the 1979 Legislative Session; thus, it was felt that a request for an increase at that time would have a negative legislative impact detrimental to the physicians of Florida. Therefore, the House of Delegates in 1979, in Recommendation No. E-1, approved a delay in the initiation of a petition pending the outcome of the Legislature. The 1979 Legislature provided no relief, and on October 5, 1979, a petition was filed which resulted in a 35 percent increase being granted in March and becoming effective on July 1, 1980.
- The 1980 Legislature reacted very strongly to the impact of this increase on Workers' Compensation insurance premiums and it was necessary for FMA to oppose and defeat legislation that would have rescinded the increase and frozen the level of reimbursement at the 1975 level. FMA also was successful in having a law passed to create a position of full-time medical consultant to assist the newly named Division of Workers' Compensation along with a program of peer review. In addition, the Legislature created a Three Member Panel consisting of the Insurance Commissioner, the Secretary of Labor, and the Medical Consultant to the Division of Workers' Compensation who were charged by law to incorporate annual schedules of maximum charges for treatment or services. Throughout the year, the FMA worked with the Division on evaluating the Fee Schedule revealing the fee inadequacies of various sections and the need for updating the terminology, procedure codes, and relative values.

 The FMA during this period was in the process of revising the *Florida Relative Value Studies*. The available, statistically valid data were used to demonstrate to the Division the lack of parity in the Fee Schedule, the lack of relationships between the levels of reimbursement and actual charge data, the need for updating codes and descriptors, and the need for a separate conversion factor for Broward, Palm Beach, Dade and Monroe Counties.
- On August 26 and December 10, 1981, the FMA petitioned the Three Member Panel for payment of usual and customary fees. A second proposal was made that if physicians could not be reimbursed their usual and customary fees, the Workers' Compensation program should reimburse them at the 75th percentile of actual charges with a differential for Broward, Palm Beach, Dade and Monroe Counties.
- The Three Member Panel recommended on January 7, 1982 that physicians be reimbursed at the 66⅔ percentile of charge data. A comparison of frequently used procedures under the



Two polished public speakers, Mr. Robert D. Novak of Washington, D.C. (left), and Edward R. Annis, M.D., of Miami, engage in a chat. Mr. Novak presented the annual Baldwin Lecture.

Workers' Compensation program showed only a slight difference between the 66⅔ and 75th percentiles resulting in the FMA Board of Governors reluctantly approving the increase with the understanding that the Panel would work closely with the FMA toward a more equitable reimbursement for physicians' services when the 1983 Workers' Compensation Fee Schedule is developed. Increasing the fee schedule to the 66⅔ percentile encouraged many more physicians to participate in the Workers' Compensation program.

Once again, the question of a fee differential was posed by the FMA and was rejected. FMA employed a consultant to study the need for a fee differential. Dade County Medical Association also employed a consultant, and it was agreed to share the results of both studies and coordinate testimony before the Three Member Panel. Testimony was presented, but the Panel requested additional information.

- The Insurance Commissioner, Department of Labor, Division of Workers' Compensation and Associated Industries of Florida, Inc., have expressed opposition to a fee differential because of the impact it would have on Workers' Compensation rates and the way future rates would have to be determined.
- The Board of Governors has approved that the FMA investigate the possibility of studying the comparative costs of practicing medicine in various parts of the state for the purpose of preparing requested testimony for the Workers' Compensation Three Member Panel in the coming year for a fee differential. This activity will be done, at the Board's request, with the AMA in order to take advantage of their resources and available information.

A copy of the testimony presented by the FMA regarding legislation being considered that would establish a statewide fee schedule is included in the Delegates Notebook.

Report of the Florida Medical Foundation — PMUR

The section of the Florida Medical Foundation's Report concerning PMUR was adopted. (See Florida Medical Foundation Report, page 539.)

RESOLUTION 83-6
Assignment of Insurance Benefits

Dade County Medical Association

The Reference Committee moved to amend the "Resolved" portion of the Resolution to read as follows:

"RESOLVED, That the FMA request its legal counsel to investigate the legality of insurance carriers who do not honor a signed assignment of benefits on insurance forms; and be it futher

RESOLVED, That if found to be legally feasible upon investigation by legal counsel, FMA take whatever steps are available to ensure that this practice be discontinued."

The motion carried and Resolution 83-6 was adopted as amended.

RESOLUTION 83-6
Assignment of Insurance Benefits

RESOLVED, That the FMA request its legal counsel to investigate the legality of insurance carriers who do not honor a signed assignment of benefits on insurance forms; and be it further

RESOLVED, That if found to be legally feasible upon investigation by legal counsel, FMA take whatever steps are available to ensure that this practice be discontinued.

RESOLUTION 83-7
Workers' Compensation Medical Fee Schedule

Dade County Medical Association

RESOLUTION 83-14
Workers' Compensation Fee Differential

Palm Beach County Medical Society

The Reference Committee heard lengthy commentary regarding Resolutions 83-7 and 83-14. Considering these resolutions pertained to related subjects, the Committee offered a Substitute Resolution which was adopted.

SUBSTITUTE RESOLUTION 83-7
Workers' Compensation Medical Fee Schedule

RESOLVED, That the FMA continue its efforts to obtain equitable fee differentials throughout the state and that the fees sought be equivalent to the usual and customary fees charged in the various communities; and be it further

RESOLVED, That if FMA is unsuccessful in achieving fee differentials under its present course of action, the FMA seriously study the possibility of litigation which would eliminate the present Workers' Compensation Medical Fee Schedule and instead provide reimbursement based upon usual and customary charges for such services as is done in 33 states; and be it further

RESOLVED, That FMA support the concept of regional differentials Workers' Compensation fee schedules for physicians practicing medicine in counties where the cost of living is higher than the average for the state of Florida.

RESOLUTION 83-15
Statewide Peer Review Organizations (PRO)

Duval County Medical Society

Resolution 83-15, Statewide Peer Review Organization (PRO), was adopted.

RESOLUTION 83-15
Statewide Peer Review Organizations (PRO)

RESOLVED, That the Florida Medical Association's House of Delegates, at the 1983 Annual Meeting, approve for implementation an FMA sponsored Peer Review Organization, and develop the program in concert with interested county medical societies.

RESOLUTION 83-21
Opposition to Changes in JCAH Standards for Hospitals

Brevard County Medical Society

RESOLUTION 83-22
JCAH Accreditation Manual Revisions

Dade County Medical Association

The Reference Committee was informed that the intent of Resolutions 83-21 and 83-22 had already been effected by the AMA Board of Trustees. Therefore, a Substitute Resolution was offered. Motions were made from the floor to amend the Substitute Resolution.

Substitute Resolution 83-21, Opposition to Changes in JCAH Standards for Hospitals, was adopted as amended.

RESOLUTION 83-21
Opposition to Changes in JCAH Standards for Hospitals

RESOLVED, That the Florida Medical Association support and reaffirm the intent of the AMA House of Delegates in retaining the use of the words "medical staff" in lieu of "organized staff" in the JCAH Standards for Hospitals and further recommend that standards not be changed to permit non-supervised care of patients by persons not fully qualified to practice medicine.

RESOLUTION 83-23
DRG System of Health Financing

Escambia County Medical Society

The Reference Committee moved to amend the "Resolved" portion of the Resolution to read as follows:

"RESOLVED, That the Florida Medical Association instruct its Delegates to the American Medical Association to express to the AMA the concern of the physicians of Florida for the DRG System of Health Financing as it relates to the quality and rationing of health care."

The motion carried and Resolution 83-23 was adopted as amended.

RESOLUTION 83-23
DRG System of Health Financing

RESOLVED, That the Florida Medical Association instruct its Delegates to the American Medical Association to express to the AMA the concern of the physicians of Florida, for the DRG system of Health Financing as it relates to the quality and rationing of health care.

The Reference Committee expressed its gratitude to those who appeared before the Committee.

Dr. Dunn expressed his appreciation to his Committee consisting of Faris S. Monsour, M.D.; Robert H. Hux, M.D.; Hector R. Mendez, M.D.; and Paul A. Flaten, M.D., stating that he was fortunate to work with a most efficient and informed Committee, and expressed the Committee's appreciation to Charles P. Hayes Jr., M.D., Chairman of the Council on Medical Economics, for his valuable input. The Committee also expressed its appreciation for the informed assistance of Robert W. Seligson, FMA Staff, and the efficient secretarial help of Ms. Joanelle Fulton, CPS.

The motion of the Reference Committee that the Report of Reference Committee V be adopted as a whole, as amended, carried.

Elections

President-Elect

The Speaker opened the floor for nominations for the office of President-Elect. Dr. James A. Winslow, Jr. of Hillsborough County nominated Dr. Frank C. Coleman of Tampa. The nomination was seconded by Dr. Robert E. McCammon of Hillsborough County; Dr. Kenneth C. Kiehl of Sarasota County; Dr. Daniel L. Seckinger of Dade County; Dr. Faris S. Monsour of Duval County; Dr. Carlos G. Llanes of Dade County; Dr. Francis Lee Howington of Lee County; Dr. Wilburn R. Jenkins of Citrus County; and Dr. Theodore W. Hahn of Broward County.

Dr. Robert N. Serros of Orange County nominated Dr. James F. Richards, Jr., of Orange County for President-Elect. The nomination was seconded by Dr. Howard P. Hogshead of Duval County; Dr. William C. Hartley of Broward County; Dr. Charles J. Kahn of Escambia County; Dr. Joseph C. Von Thron of Brevard County; and Dr. David T. Overbey of Pinellas County.

The ballots were counted and the Speaker announced that Dr. Frank C. Coleman had been elected President-Elect.

Dr. Richards congratulated Dr. Coleman and asked that in the name of unity of the House that this election be unanimous. Dr. Richards request was so ordered by the Speaker.

Vice President

The floor was opened for nominations for the office of Vice President. Dr. Daniel L. Seckinger of Dade County nominated Dr. Charles A. Dunn of Dade County. The nomination was seconded by Dr. Richard C. Dever of Duval County; Dr. Stanley S. Goodman of Broward County; Dr. J. Robert Qualey of Hillsborough County; Dr. Luis R. Guerrero of Palm Beach County; Dr. Edward W. Stoner of Orange County; and Dr. Virgil A. Ponzoli, Jr. of Collier County.



Frank C. Coleman, M.D., of Tampa, thanks the House of Delegates for the confidence it has expressed by electing him President-Elect of FMA.

Dr. Richard W. Snodgrass of Volusia County nominated Dr. James G. White of Volusia County for Vice President. The nomination was seconded by Dr. William B. Deal of Alachua County; Dr. James Russell Forlaw of Palm Beach County; Dr. Juan S. Wester of Broward County; Dr. John M. Hamilton of Pinellas County; Dr. Robert H. Threlkel of Duval County; Dr. Francis L. Howington of Lee County; Dr. Charles J. Kahn of Escambia County; and Dr. Wilburn R. Jenkins of Citrus County.

The ballots were counted and the Speaker announced that Dr. James G. White had been elected Vice President.

A motion that the House of Delegates give its unanimous support to Dr. White carried.

Speaker of the House
Vice Speaker of the House
Secretary
Treasurer
AMA Delegate Seat #1
AMA Alternate Seat #1
AMA Alternate Seat #2
AMA Delegate Seat #4
AMA Alternate Seat #4
AMA Delegate Seat #7
AMA Alternate Seat #7
AMA Delegate Seat #8
AMA Delegate Seat #9
AMA Alternate Seat #9
AMA Delegate Seat #10
AMA Alternate Seat #10
AMA Delegate Seat #11

The Speaker entertained a motion to elect by acclamation candidates for Speaker of the House, Vice Speaker of the House, Secretary, Treasurer, AMA Delegate Seats 1, 4, 7, 8, 9, 10, 11, and Alternate Seats 1, 2, 4, 7, 9, 10, and 11, all of whom are incumbents and unopposed with the exception of new Seats 9, 10 and 11. The motion carried unanimously and the following candidates were elected:

Speaker of the House — James B. Perry, M.D.
Vice Speaker of the House — Franklin B. McKechnie, M.D.
Secretary — Luis M. Perez, M.D.
Treasurer — Yank D. Coble Jr., M.D.
AMA Delegate Seat #1 — T. Byron Thames, M.D.
AMA Alternate Seat #1 — Vincent P. Corso, M.D.
AMA Alternate Seat #2 — James B. Perry, M.D.
AMA Delegate Seat #4 — Burns A. Dobbins Jr., M.D.
AMA Alternate Seat #4 — Eugene G. Peek Jr., M.D.
AMA Delegate Seat #7 — Joseph C. Von Thorn, M.D.
AMA Alternate Seat #7 — James W. Walker, M.D.
AMA Delegate Seat #8 — Louis C. Murray, M.D.
AMA Delegate Seat #9 — Robert E. Windom, M.D.
AMA Alternate Seat #9 — William B. Deal, M.D.
AMA Delegate Seat #10 — Luis M. Perez, M.D.
AMA Alternate Seat #10 — Arthur L. Eberly Jr., M.D.
AMA Delegate Seat #11 — Sanford A. Mullen, M.D.

The new terms for Delegates, Seats 1, 4, 7, 8, and Alternates, Seats 1, 2, 4, and 7, are for two years (January 1, 1984 to December 31, 1985). The terms for Delegates, Seats 9, 10, and 11, and Alternates, Seats 9 and 10, are retroactive to January 1, 1983, expiring December 31, 1984.

AMA Delegate — Seat #6

The Speaker opened the nominations for AMA Delegate Seat #6 for a term that begins January 1, 1984 and ends December 31, 1985.

Dr. Vincent P. Corso of Miami was nominated for AMA Delegate Seat #6 by Dr. Joseph H. Davis of Dade County. The nomination was seconded by Dr. James A. Winslow, Jr. and Dr. Andre S. Capi of Broward County.

Dr. Charles J. Kahn of Pensacola was nominated for AMA Delegate Seat #6 by Dr. Charles F. McConnell of Escambia County. The nomination was seconded by Dr. Charles P. Hayes, Jr. of Duval County; Dr. Larry P. Garrett of Lee County; and Dr. John M. Hamilton of Pinellas County.

The votes were counted and the Speaker announced that Dr. Charles J. Kahn had been elected to AMA Delegate Seat #6.

AMA Alternate — Seat #6

The Speaker opened the nominations for AMA Alternate Seat #6 for a term that begins January 1, 1984 and ends December 31, 1985.

Dr. O. William Davenport of Miami was nominated for AMA Alternate Seat #6 by Dr. Norman M. Kenyon of Dade County. Dr. Kenyon requested that

no second nominations be required. Permission was granted by the Speaker.

A nomination was received from the floor to nominate Dr. V.A. Marks of Palm Beach County for AMA Alternate Seat #6. The nomination was seconded by Dr. William T. Branch of Hillsborough County.

The votes were counted and the Speaker announced that Dr. O. William Davenport had been elected to AMA Alternate Seat #6.

A motion was moved by Dr. Marks to make the election unanimous. The motion carried.

AMA Alternate — Seat #8

The Speaker opened the nominations for AMA Alternate Seat #8 for a term that begins January 1, 1984 and ends December 31, 1985.

Dr. Joseph T. Ostroski of Miami was nominated for AMA Alternate Seat #8 by Dr. Dolores A. Morgan of Dade County. The nomination was seconded by Dr. Juan Wester of Broward County and Dr. Richard J. Feinstein of Dade County.

Dr. Donald G. Nikolaus of Dunedin was nominated for AMA Alternate Seat #8 by Dr. Kay K. Hanley of Pinellas County. The nomination was seconded by Dr. Charles S. Eytel of Collier County.

The votes were counted and the Speaker announced that Dr. Joseph T. Ostroski had been elected to AMA Alternate Seat #8.

A motion was received from the floor to make the election unanimous. The motion carried.

AMA Alternate — Seat #11

The Speaker opened the nominations for the new AMA Alternate Seat #11 for a term that begins retroactive to January 1, 1983 and ends December 31, 1984.

Dr. Robert E. Boyett of Miami was nominated for AMA Alternate Seat #11 by the delegation from Dade County. The nomination was seconded by Dr. Ernest G. Sayfie of Broward County.

Dr. Dick L. Van Eldik of Palm Beach was nominated for AMA Alternate Seat #11 by Dr. J. Russell Forlaw of Palm Beach County. The nomination was seconded by Dr. Kenneth C. Kiehl of Sarasota County.

The votes were counted and the Speaker announced that Dr. Dick L. Van Eldik had been elected to AMA Alternate Seat #11.

Judicial Council

The Speaker referred the House to the Report of the Board of Governors in which the Board had nominated Robert J. Brennan, M.D. for re-election from Medical District C for a five year term expiring in 1988.

The nomination was adopted and Dr. Robert J. Brennan was elected by acclamation.

Committee on Membership and Discipline

The Speaker referred the House to the nominations for election to the Committee on Membership and Discipline as submitted by the Board of Governors in its report and asked for additional nominations from the floor. A request came from the floor by Dr. Larry P. Garrett of Lee County to withdraw the name of Cecil C. Beehler, M.D. from District 13, at the request of Dr. Beehler. The request was approved and the remaining candidate for District 13, Joseph P. O'Bryan, M.D., was elected to District 13 by acclamation. It was noted in the Report of the Board of Governors that because of congressional redistricting, it was necessary for the House to vote on the entire membership of the Committee on Membership and Discipline. There being no further comments or nominations from the floor, it was moved and seconded that the nominees as proposed by the Board of Governors be elected to the Committee on Membership and Discipline.

The motion carried.

Committee on Membership and Discipline

Because of congressional redistricting it is necessary for the House of Delegates to vote on the entire membership of the Committee on Membership and Discipline. Members whose terms have not yet expired and whose congressional district changed as a result of redistricting have been moved to the appropriate new district.

The Board, therefore, submits to the House of Delegates, the following nominations for election from the districts and for the terms indicated:

District 1:	Rufus Thames, M.D. (85) Robert C. Palmer, M.D. (84) James T. Cook III, M.D. (87) Lealis L. Hale Jr., M.D. (86)
District 2:	Robert P. Johnson, M.D. (87) James T. Cook Jr., M.D. (84) Herbert E. Brooks, M.D. (85) James K. Conn, M.D. (86)
District 3:	Hugh A. Carithers, M.D. (87) John A. Rush, M.D. (84) Joe C. Ebbinghouse, M.D. (85) Samuel J. Alford Jr., M.D. (86)
District 4:	Charles Barrineau, M.D. (87) Richard W. Snodgrass, M.D. (84) Bruce R. Witten, M.D. (85) H. Frank Farmer Jr., M.D. (86)
District 5:	Calvin R. Peters, M.D. (87) Clarence M. Gilbert, M.D. (84) Frederick J. Weigand, M.D. (85) Jorge Gomez, M.D. (86)
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Dr. Dockery announced the members of the Board of Governors who had been either appointed or elected:

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Robert N. Webster, M.D. (SBME-84)
Mr. D. Scott Featherman, (Student-84)

The Speaker resumed the Chair and called upon Dr. Ernest G. Sayfie for the benediction.

The 1983 House of Delegates adjourned at 11:55 a.m.

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1983 - 1984

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NOTES & NEWS

J. Lee Dockery, M.D., elected to AMA Council on Medical Education



J. Lee Dockery, M.D.

J. Lee Dockery, M.D., President, Florida Medical Association was elected to the AMA Council on Medcial Education at the AMA Annual Meeting, June 19-23, 1983 in Chicago. President Dockery waged an energetic campaign emphazing the positive image of doctors and the need for medical education programs to produce the most qualified practitioners possible.

The Council on Medical Education addresses all facets of education, from medical school and residency programs to continuing education and allied health training. Its primary charge is to study and evaluate medical education to provide well-qualified physicians able to meet the needs of the public. Membership on the Council on Medical Eduation is for a three year term.

Dr. Dockery is an Obstetrician/Gynecologist and Associate Dean, University of Florida College of Medicine.

Supreme Court of Florida upholds rule that bars the mention of insurance in medical malpractice trials

Florida Rule of Civil Procedure 1.450(e) was recently challenged by the Florida Bar as being unnecessary. Rule 1.450(e) states:

> (e) *Reference to Insurance in Medical Malpractice Actions.* In any civil medical malpractice action, the trial on the merits shall be conducted without any reference to insurance, to insurance coverage, or to the joinder of an insurer as co-defendant in the suit.

According to the Bar, the rule created desparate treatment in regard to other tort cases where insurance was involved. Mr. John E. Thrasher, FMA Legal Counsel states that . . . the significance of this decision is that it will continue the practice of not allowing reference to insurance coverage in a trial involving a medical malpractice case. It was our position that reference to insurance coverage has a most definite and improper effect upon increasing the likelihood of a jury verdict."

FMA Past President Walter C. Jones, M.D., dies

Walter Colquitt Jones Jr., M.D., of Coral Gables, the oldest living Past President of the Florida Medical Association, died on June 18, after a long illness. He was 86.

Dr. Jones was installed as President of the FMA in 1941, some 13 years after he headed the Dade County Medical Association. He also was a Past President of the Southern Medical Association; the Southeastern Surgical Congress and the Medical Staff of Miami's Jackson Memorial Hosptial.

Born at Waverly Hall, Georgia, on November 27, 1896, Dr. Jones attended Meridian College, graduating in 1917, and received his M.D. degree from Emory University School of Medicine in Atlanta four years later. He remained in Atlanta for two years of graduate training at Grady Hospital.

A memorial service and burial took place in Coral Gables on June 20. In lieu of flowers, the family suggested memorial contributions to the John MacAloon Foundation, Doctors Hosptial, 5000 University Drive, Coral Gables, Florida 33134.

Drs. Bertoncini, Wagaman and Morgan featured in article on nurses who became M.D.'s

Three Florida physicians who began their careers as nurses were featured in the June 13, 1983 issue of *Medical World News*. Betty Jo Bertoncini, M.D., and Marcia Wagaman, M.D. both of St. Petersburg and Dolores Morgan, M.D. of Miami presented their views on doctor-nurse relationships from the unique viewpoints of doctors who had devoted many years to nursing prior to medical school.

Statistics on use of outpatient services available

Statistics on use of outpatient services in the U.S. are reported in "Utilization of Outpatient Care Resources," a publication of the National Center for Health Statistics. Volume of service is provided according to the settings in which they were delivered, including geographic region or state, type of service, demographic characteristics of the patient and health problems treated.

In the report, an outpatient care resource is defined as a health care professional, facility, or program within a facility that regularly provides health care service to outpatients. Two major categories are practitioners' offices and clinics, either hospital-affiliated or free-standing. Practitioners' offices are either individual or group-care practices. Outpatient clinic refers to a hospital, church, or private building which provides emergency or nonemergency health services.

According to the report, the largest proportion of outpatient care from 1970-1979 was provided in physicians' offices (78 percent in 1979), hospital affiliated clinics were second with 15 percent. Number of office visits to physicians increased by 16 percent between 1967 and 1979. This is no change in the rate of visits per 1,000 population, since the population increased simultaneously during this time. The rate of dental visits increased by 21 percent, an actual rate per thousand increase of 12 percent.

A significant increase was in the number of outpatient visits to hospitals in the civilian population, which rose 36 percent. Emergency room visits increased by 97 percent during this period, while other hospital visits increased only 17 percent. Emergency room outpatient treatment accounted for 24 percent of all hospital outpatient visits in 1974; in 1979, 35 percent of outpatient service was in the emergency room.

National Center for Health Statistics, "Utilization of Outpatient Care Resources," (PHS) 83-1240, 66 pp. Public Health Services, Hyattsville, MD 20782. Copies of this report may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. (GPO Stock Number: 017-022-00816-5; price, $5.00)

Hospital Association offers hurricane information

The South Florida Hospital Association is offering a free brochure that explains what to do in the event of a hurricane. The brochure, entitled "Hurricane Preparedness," describes a step-by-step procedure to follow for making advance hurricane preparations.

Hurricanes have the power to slam into South Florida's shoreline with 200-mile-per-hour winds and tides that can surge up to 18 feet or more above mean sea level. "They leave behind death, injuries and property destruction amounting to hundreds of millions of dollars," says Alfred F. Popoli, president of the Association. "Now is the time to ask these questions: In the event of a hurricane, are your home and family safe? If not, have you developed and practiced evacuation procedures? Are you stocked with adequate quantities of proper food, water and other emergency supplies? You should have positive answers to all those questions because sooner or later a hurricane will strike."

For a free copy of the "Hurricane Preparedness" brochure, write the South Florida Hospital Association, 5200 NW 84th Avenue, Suite 101, Miami, Florida 33166, or call 591-8023 in Dade and 522-3433 in Broward.



DEAN'S MESSAGE

Professional liability issue — much more than a physician issue

On May 4, 1983, I was invited to provide my views on the professional liability issue to the Senate Commerce Committee. Other individuals who participated included representatives of the School Board, business, the railroad industry, health care institutions, plaintiff attorneys and the insurance industry.

I have made a synopsis of the comments made to the Senate Commerce Committee. They are as follows:

My name is Bernard J. Fogel. I am a pediatrician and the Dean of the University of Miami School of Medicine. Not withstanding my qualifier, I will attempt to address you not only as a citizen vitally concerned about our health care system, but also as a physician and administrator.

As several others have stated, the issue of SB1017 or similar legislation is not one of plaintiff attorneys versus the medical profession. As long as it is viewed in that context, a major problem confronting this State and society will not be solved. It must be viewed as Senator Barron stated, "...in the same manner that the legislature dealt with the issues of Worker's Compensation and No Fault Insurance."

Everyone recognizes that the costs of professional liability are ultimately passed on to the health care consumer. Therefore, I respectfully submit that you

cannot deal with rational health care cost containment issues without addressing the problems being considered by you today.

From October 1, 1980, to September 30, 1982, slightly more than $8 million was expended by participants within the University of Miami-Jackson Memorial Hospital Medical Center on 58 closed cases. The figure does not include cases closed without indemnity but having applicable expense payments, nor a substantial amount spent on policing all health care practices through the Risk Management Office. The eight million dollars did not include the incalculable cost of so-called "defensive medicine".

More distressing is the fact that:

> Less than 30% of the dollars actually benefited the injured party. Considerable resources in the form of health care personnel and needed technical equipment are unavailable in the Center because we simply do not have the dollars to pay for them when the money is spent on professional liability. I might add, parenthetically, that when similar dollars are lost to the other medical schools in the State, education and services are likewise compromised and ultimately the State pays the bill.
>
> Neither we nor anyone else has any idea of the amount of money related to this problem that is directly affecting the overall cost of health care.

I would suggest that representatives of counties, institutes of higher learning, school boards, industry, etc., are also having their budgets severely taxed because of the professional liability issue and relative tort questions involved. One only has to read the *Miami Herald* to realize the Medicare System is facing bankruptcy. In less than a decade health care costs have risen to 10% of the Gross National Product. I am not suggesting that the professional liability issue is a single contributor or the major contributor to the health care cost, but it definitely adds to the problems.

Finally, I want to emphasize that we recognize that medical malpractice does exist. Victims should be fairly and adequately compensated. Physicians must be policed and unqualified ones denied the privilege of practicing. But once and for all, we must through the political process, bring some rational solutions to this problem. I strongly endorse SB1017 which was drafted by Senator Kirkpatrick as a vehicle, such as Workmen's Compensation and No Fault Insurance, to solving this problem which happens to occur in the hospital environment rather than on the highways or at work.

The State Legislature should end its deliberations by the second week in June. Whether there will be changes in the tort system is, at this point, anybody's guess. However, it is clear that this critically important issue has had a thorough hearing during the 1983 legislative session. At this point, it appears that the Senate is extremely sensitive to some sort of reform. More importantly, it appears that for the first time the issue is being addressed in terms of public need and not one simply affecting the physicans of this State. There is reason to be encouraged that either in this session or in subsequent sessions tort reform may be come about.

Bernard J. Fogel, M.D.
Vice President for Medical Affairs
and Dean, University of Miami School
of Medicine

PLI UPDATE

Hospital liability

In recent years, in states other than Florida, the law pertaining to hospital liability has expanded. Florida, like most states, recognizes that a hospital owes patients the duty to supply a trained and capable staff of employees. When a patient is injured by reason of the negligence of the hospital employees then the hospital would be liable. However, some states, other than Florida, have expanded the area of hospital liability.

In recent years a number of states have upheld hospitals responsible for carefully monitoring and reviewing their staff members, verifying the qualifications of their staff, and assuring the continued competence of their staffs. These states have made hospitals liable, not only for the acts of their employees, but for the acts of staff members, if it can be shown that the hospital did not thoroughly investigate the staff members background, qualifications and competence.

In a recent Wisconsin case, a court held that the failure to investigate a medical staff applicants' qualifications, when reviewing the request for privileges, violates a duty of care to the patients. The court felt that in investigating qualifications of medical staff applicants, a hospital, at minimun, should: require completion of an application and verify the accuracy of the applicants statements, especially in regard to his medical education, training and experience; solicit information from the applicants peers, including those not referenced in his application, who are knowledgeable about his education, training, experience, health, competence and ethical character; determine if the applicant is currently licensed to practice in the state and if his licensure or registration has been or is currently being challenged, and inquire whether the applicant has been involved in any adverse malpractice actions and whether he has experienced a loss of medical organization membership or medical privileges for membership in any other hospital.

The court, recognizing that patients expect to receive quality care and treatment during hospital

stays, imposed a duty on the hospital to carefully select and maintain a competent medical staff. Thus the court found the hospital liable for granting staff privileges to a physician when reasonable investigation would have revealed that the physician was unqualified.

Similarly, a California court recently held that a hospital may be liable for the malpractice of an independent staff member if evidence establishes that the hospital was negligent in its peer review procedures.

In this case the hospital had followed the Joint Commission on Accreditation of Hospitals procedures and standards for granting the podiatrist staff privileges. However, the court felt that since the podiatrist had a malpractice action filed against him for a similar procedure, the hospital should have reviewed the podiatrist's hospital privileges.

In this California case the court felt that the hospital had not fulfilled its duty to continually review the competency of its medical staff. The failure to carry out this review could constitute negligence if a patient is injured due to that failure.

Finally, it must be stressed that these cases and developments in the law are not in Florida. In addition, it should be noted that hospitals, in reviewing staff members credentials either for admission on to their staff or as to continuing competence as a member of their staff, must comply with state statutes and due process. This entails complying with hospital and medical staff bylaws.

The development of the law pertaining to hospital liability in other states is useful in that it may help to point out the need for careful review and investigation by hospital credential committees prior to recommending admission of staff members and the extent of privileges. In addition, that care must be continued in the ongoing competence reviews of staff members.

Prepared and submitted by John E. Thrasher, J.D., Vice President and Legal Counsel, Professional Insurance Management Company (PIMCO) and Thomas S. Edwards, Jr., Law Clerk.

WORTH REPEATING

Preventive medicine and American lifestyles

In almost any discussion of medical care, "preventive medicine" is bandied about like it is a magic potion and a cure-all for what ails our current medical system. Among politicians, medical bureaucrats, health freaks, and a few fringe physicians, it has become a rallying cry in their campaign to make Americans ostensibly healthy and to cut the cost of our spiraling medical bill. Along the way, these standard bearers of preventive medicine have mastered the rhetoric of chastising the medical profession for concentrating its efforts on sick people, suggesting that physicians are to blame for failing to make and keep Americans healthy. Even the government swallowed this bit of nonsense when, in 1973, Congress enacted the HMO concept which has at its core the belief that people, like well-oiled engines, can be maintained healthy. Healthy people, *ergo*, less medical bills.

It all sounds so good. The problem is the criticisms against the medical profession are unfounded. Most physicians, contrary to popular belief, practice preventive medicine to one degree or another, and one good proof lies in the fact that most childhood infectious illnesses have been eradicated. Among adults strokes and heart disease, while only partially preventable, have decreased in incidence from more aggressive efforts by physicians to treat hypertension and other recognized risk factors. The introduction of new vaccines and other preventive measures also has made it possible to curb epidemics and abort other serious illnesses. Despite this progress, it appears that we still have not succeeded enough.

If those vociferous critics of American medicine are talking about the increasing incidence of alcoholism, drug addiction, mental disease, lung cancer, obesity, and broken bones from accidents, then physicians are hardly to blame. These problems stem more from the the environment and from lifestyles that Americans have chosen to adopt rather than from the failure of the medical profession to do anything. I suspect that many people expect their physicians to also solve all these problems. But it is not clear that these complex problems, amenable not by empty slogans or by medical solutions. The medical profession, in the end, becomes the repository of the human tragedy engendered by the increased hospitalizations, mounting disabilities, and high medical bills.

Against this backdrop, we have become a nation steeped in the pursuit of leisure and pleasures of all sorts, living in reckless abandon, believing that tomorrow may never come. The result, unhappily, has been to encourage among Americans the adoption of dissipating and destructive habits and to create, in the process, a vast army of physical, mental, and emotional misfits.

Take alcoholism. It has spread like wildfire, affecting Americans of all ages and all walks of life, and is steadily consuming more victims every year. Whether alcoholism is a disease or not, many Americans don't care and they drink more than ever before. The increasing number of cirrhotic patients, the proliferation of alcoholic treatment centers, and the spate of drunken driving laws enacted recently by several states all attest to the gravity of the problem.

The same is true with cigarette smoking. Despite overwhelming evidence that cigarette smoking accounts for about 25% of all human cancer and contributes to heart disease, the government has conveniently abetted the deception by refusing to acknowledge the evidence and to ban cigarettes altogether.

Politicians glibly argue that banning cigarettes would wipe out the economies of several states dependent on the growing of tobacco. This is an effete excuse for a government that ostensibly believes in keeping its citizens healthy.

Drug addiction is another spectre threatening to convert America into a nation of freaks, cop-outs, bums, acid heads, and schizophrenics. To get high, to get low, and to freak out — that has been the guiding light for a generation of Americans taking on the drug trip. The havoc that drug addiction is wreaking on Americans is incalculable, perhaps approaching that of alcoholism. It has also spawned a thriving industry, drug smuggling, along with all the problems that it breeds.

One can go on and on, but there is the ineluctable judgment that our lifestyles betray our increasing mania to stay fit and healthy. Calling on physicians to practice more preventive medicine sounds hollow at best. To speak of keeping Americans healthy requires herculean efforts and draconian measures, necessitating drastic and massive changes in almost every segment of our society. Physicians, to be sure, will have their role, but they will need plenty of help. Until Americans decide to give up all their bad habits, it would be wishful thinking to hope that we have found a panacea for our problems.

RGL

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Malpractice — The media and politics

"Patient wins $2 million judgement."

Headlines such as this are common. Only the amounts vary. The numbers are not only large, but they are striking closer to home. The chances are now one in four or five that, as a physician, you will be sued for malpractice. The frequency and size of settlements and the cost of insurance protection are increasing at the same time the public is questioning both the price and the quality of the medical care they receive.

We are all sensitive to media treatment of these issues. Newspapers and magazines seem to focus on stories of medical incompetence. Movie plots seem to favor the cover-up techniques of physicians. TV programs such as "60 Minutes" seem intent on seeking out, exposing, and expanding examples of medical chicanery and outright blunders. Whether or not these plots approximate reality, as opposed to being merely isolated and selective episodes, negative ideas are implanted in the public mind. Popular themes; we lust after medicare and medicaid payments; we prescribe simple chemical solutions to complex health challenges.

Is malpractice insurance the solution or only an expansion of the problem? Is health care to expensive? Are we practicing bad medicine?

In response health care is expensive, but I am most impressed by the impetus given the upward cost spiral by malpractice judgements and malpactice insurance. The worse effect of the malpractice syndrome is not that it increases the physicians costs. It is that it also ineluctably leads to the practice of defensive-and-expensive medicine.

Second, I am confident that, compared to the past, we are practicing better medicine; and we and our support professionals are most skilled; and that our techniques are improved and more effective.

Third, I believe that we work harder to police our ethics and to conduct our business — and to refine our skills — than is commonly known. Parenthetically, I also believe that the present system often thwarts our efforts.

But disclaimers are not sufficient. We must face the reality that we are far from perfect and that we seldom reach our own highest standards. But we can work, and indeed we are working, on those medical aspects which we can change for the better. For example, we can effect improvements in professional and technical skills, in doctor-patient relationships, in community understanding of medical challenges and efforts, and in other areas.

We must also recognize that some of the challenges to our profession and to us as individuals are outside our power to resolve. Right now the malpractice issue is most serious and pressing. We need drastic legislative action. This action must zero in on arrangements for contingency fees, the use of mediation panels, and the handling of judgements.

I've been conscious lately of a prevasive hostility, often submerged in physicians by the niceties of social and professional relationships. This antagonism seems to be directed toward attorneys because of their interest in the profitable malpractice market and because this interest is in conflict with their roles as legislators.

In defense of attorneys, I point out that only 5%, more or less, of lawyers are involved in medical litigation. I am also confident that some of them are qualified to represent medical and health causes in the legislature.

The recently-completed state legislature primary would have been an excellent opportunity to present those causes. (A campaigning politician is a listening politician!) How many of us spoke up and how many of us were actually heard by our representatives? Even more relevant questions: How many of us know who is running as our district representative? How many of us voted?

The crisis need not be greater for us to act. Through the outlined and proposed actions of the FMA we can now prepare for the next legislative session and the next election. Finally, let us resolve to participate as individuals, local and community citizens who are concerned and actively involved in the political process.

Robert K. Lankford, M.D.
Deland

Reprinted with permission from *The Stethoscope* medical bulletin of the Volusia County Medical Society, September 1982.

Don't blame all of medicine's problems on lawyers

Relentlessly the medical profession is pursuing a course leading to decreasing public respect and increasing litigation. Sophisticated ambulance chasing and contingency legal suits must accept part of the blame. These have hassled physicians, created the practice of defensive medicine, increased medical bills, inspired unnecessary litigation, and widened the wedge between physicians and the public.

This is not a conceptual notion. It is a truth that deserves increasing action by legal and medical societies to seek out the problems and weed out the offenders in both professions.

Isn't it about time, though, that we physicians did a little honest introspection and contemplated our own faults and omissions? A human failing is to blame another for our own problems. So let's explore and examine such possibilities.

There are multiple reasons why we are losing respect. Perhaps foremost on the list is our attitude. Some physicians exude a posture of better-than-thou. Others are without a doubt snobs. A few are stuffy. There is a dire need for some to understand the difference between reverence and respect. We do not need the former. We need to regain the latter.

Our working relationships with nurses fit into this category. It is true that some nurses are openly critical of physicians, criticize them behind their backs, and discharge their duties beyond the scope of their licenses. Yet how many of us have revealed genuine respect for nurses in their diligent care and deep concern for our patients? Have we not found it easier to be critical rather than grateful? To be grumpy instead of cheerful? Or worse yet, we deny nurses the satisfaction of feeling that they are teammates by our overbearing attitude.

Strangely, our working relationships with each other also need mending. How many specialists have fractured the patient's confidence in the referring physician with a casual remark, an innuendo, or a sharp criticism? Most of us are guilty of this at one time or another, but with some it is a too-frequent ego trip. Undermining each other undermines the entire profession.

While a guest of a highly respected surgeon, I observed the following: A referred patient, about to be discharged, handed a bottle of pills to the surgeon and asked if he should continue taking them for his arthritis. The pills had been prescribed by his family physician. "That junk!" said the sugeon, throwing the bottle into the wastebasket without looking at it.

There is another situation that suggests a lack of confidence in a fellow physician. Patients referred for surgery often travel long distances. Frequent return trips are requested for removal of stitches and postoperative checkups. The referring physician is capable of doing these tasks. A simple report by the physician to the surgeon would suffice, would save time and money, and would help retain the respect of all parties. It also would help weld physicians together.

We must recognize a continuous need for change. Unquestionably, the technological face of medicine is changing rapidly. Each generation of physicians comes better equipped to unravel the mysteries of disease and respond intelligently with proper treatment. Mechanized, scientific medicine remains a boon to society. But is our computer dependence giving us a mechanistic image? An image of uncaring, unfeeling robots? Modern equipment cannot, and must not, replace the human touch. Properly, a symbiotic bond should develop, recognizing the value of technological advances and retaining the warmth of a sound patient-physician relationship.

Teaching hospitals also need to take a sharp, introspective look. Intensive training in "all the tests" often ushers young physicians into practice, *dependent* on "all the tests," even though defensive medicine is not the issue. At this time, clinical judgment deserves at least equal emphasis. Some of the physicians at these teaching hospitals also contribute to the defamation and disrespect of fellow physicians by opening a teaching session with, "We will now view mistakes of the family physician," as an introduction to a referred patient.

Repair and retention of proper professional interrelationships should not suggest disguising or concealing improper professional standards. These should surface, but through proper channels. Such channels should be defined more clearly to prompt all physicians to use them. The knowledge that a fellow physician would be treated with respect and fairness, even though his activities might be curtailed, would induce more physicians to accept responsiblity in reporting problems of judgment, drugs, or age.

Nor should the presumption that all physicians in the specialties are above reproach be continued. Such a presumption is ill-founded. During the last 40 years, I have seen unnecessary operations performed as frequently by board-certified orthopedic,

gynecological, and general surgeons as by those unrecognized by boards. The board certification does not certify what an individual has in his heart.

A proper board of review for reporting discrepancies in professional conduct should include all members of the medical family. This would make it more tolerable for family practice members to report properly those generally considered in the higher echelon.

Finally, what is our standard? Do we genuinely believe and desire to practice the Hippocratic oath? Is this really our guide, our ethical code? Is it more important that we be as well compensated for our efforts as other business or professional people? Or is it important that we contribute a good product at a decent price to society?

Some lawyers and some physicians have lost sight of the real purpose and responsibility of their professions. Our legal brethern need to bring their house in order — but so do we. If we, lawyers and physicians alike, would free ourselves from seeking the superficialities of our professions — money, power, and prestige — we would better carry out its responsibilities and enjoy its privileges and exciting rewards.

William B.A.J. Bauer, M.D.
Ladysmith, Wisconsin

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CORRESPONDENCE

An open letter to my colleagues

Dear Colleague: I am writing this open letter to you because of my increasing concern about our profession and the way it is perceived by the public.

It seems that the aura of dedicated healer, teacher and advisor with which we were invested for centuries has vanished and given place to an image of specialized technocrats interested in everything but our patient's welfare.

Dissatisfied and frustrated, the public, which looks for near miracles from every new drug, surgical procedure or diagnostic technique, can easily enlist the adversary assistance of eager lawyers when results do not reach the expectations implied by poorly prepared Press reports.

Medical Schools continue to select students, not on the basis of a humanistic background, but rather on how high they scored in Physics, Chemistry and Biology. Then, in the ensuing four years, the medical student's brain is crammed with a million bits of medical information, but very little emphasis is placed on kindness, courtesy and honesty toward their patients, the main reason for their existence as a professional.

They should be taught that to be a doctor means much more than just dispensing pills, patching degenerating tissues or manipulating computerized medical equipment.

Our profession still has the highest potential for greatness, if we only promise ourselves and demand of our colleagues a rededication to serve our suffering fellow human beings to the best of our abilities, and an adherance to the moral code of medicine which began when we took the Hippocratic Oath.

Let us remember every day of our lives that we became physicians not to secure a certain source of profit, but to serve mankind; not to satisfy our appetite for gain but to alleviate pain, console, and occasionally heal.

Let us educate our patients so that they may take a more active part in the decision process of diagnosis and treatment, and exercise control over how to maintain their health, and when ill, over who should take care of them, and where.

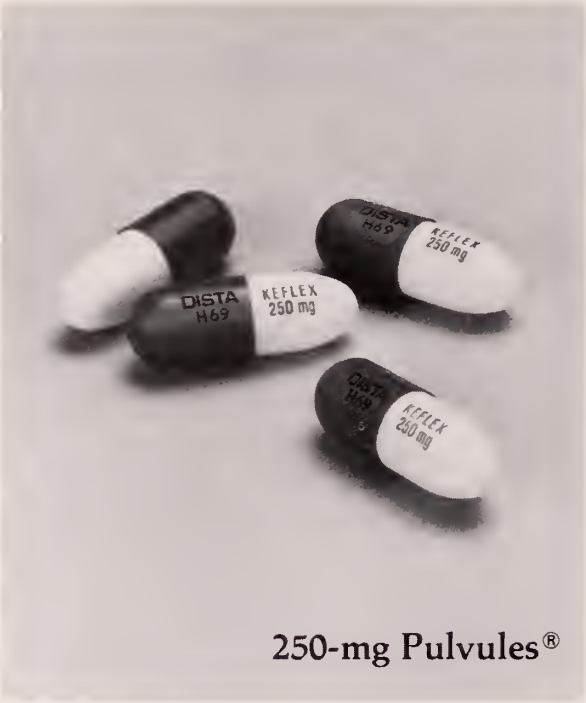
Let us invite the priest and the rabbi to the bedside to help us, since they also belong to the caring professions and have a deep knowledge and love of the human soul.

Let us be sure that the old, the poor, and the destitute don't become casualties of the new Federal regulations. Let us not confuse human beings with Diagnostic Related Subjects.

I know it is not too late to regain our patients' confidence. Ours is the only profession whose members still speak of its duties, when everyone else speaks only of his rights; that still aspires to greatness in a world of mediocrity. Let us start a renaissance of American Medicine.

Roberto Llamas, M.D.
Chief, Pulmonary Department
Miami Heart Institute

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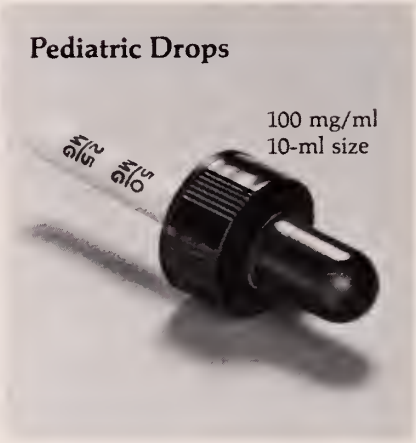


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Interplast South offers help to Hondurans

In spite of political unrest and instability in many of the countries of Central America, the medical teams of Interplast South are still going to these countries to perform plastic surgery on deformed, burned and injured children and adults free of charge.

This program has been the recipient of funds raised for International Health by the FMA Auxiliary since 1977.

The services of the physicians and other medical professionals are donated. Frequently, they travel at their own expense and work under adverse and uncomfortable conditions. Many drugs and medications are also donated. The government is not at all involved in this program. All funds are from private sources.

In certain cases where extensive, prolonged or complicated care, which is not available in the native country, is indicated, the patients are flown to Fort Lauderdale where they are treated in Holy Cross Hospital. The hospital donates rooms and nursing facilities. When patients leave the hospital, they stay in volunteer homes in Florida until they are ready to travel back to their own homes in Central America.

Roberto Palma, M.D., a Fort Lauderdale plastic surgeon, was a member of the team on the most recent Interplast trip. He spent two weeks in May of this year in San Pedro Sual, Honduras, with a team of surgeons, primary care physicians and nurses. During that time, they performed 90 operations on congenitally deformed and injured patients in temporary clinics set up in this rural area.

Burns represent the largest percentage of cases sent to Florida for treatment by the Interplast surgeons. Honduras has no facilities for burn cases and they are common there because kerosene is widely used in the rural areas where there is no electricity.

Last year much time was devoted to the reconstruction and rehabilitation of an eight year old Honduran girl, Ali, who was severely burned when her home in San Pedro Sula caught fire.

Ali was brought to Fort Lauderdale in February of 1982 with large open burn wounds and weighing only 34 pounds the balance of which was due to servere malnutrition. She was admitted to Holy Cross Hospital where, for several months, she was seen by a large number of staff physicians representing many different medical specialities. Good medical care, love and devotion finally nurtured her to the point where she was capable of withstanding multiple skin grafting procedures to cover her wounds.



Ali with her volunteer family, Spring of 1983.

When Ali first arrived, she was suffering from hepatitis. Her first few weeks at the hospital were touch and go and on more than one occassion, the doctors were concerned about her ultimate survival.

Ali's scalp skin was used to re-surface her legs and thighs and after three operations, her legs were covered. While healing, she suffered a minor fall which caused her brittle thigh bone to fracture. Her time schedule was delayed as she had to begin physical therapy all over again.

Today, Ali is a healthy looking young lady who has returned to Honduras where she is attending an American school. Her tuition is being paid by many people who were touched by her warm personality and love.

Interplast South is very grateful for the support it receives from the FMA Auxiliary. Continued support is needed so that the program can continue and expand. This coming year, Interplast South hopes to bring many children to the south Florida area for surgery which will change their lives — surgery which they could never receive in their native countries.

Mrs. Richard Ott
Ft. Lauderdale



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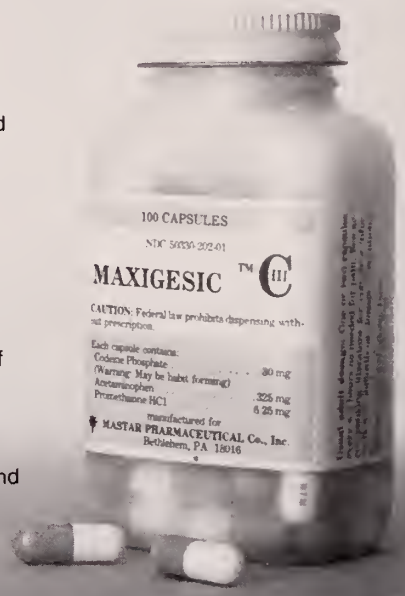
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Meetings

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AUGUST

Common Eye Disease, August 3, Lake City Medical Center, Lake City. For information: J. Turner Carson, M.D., P.O. Box 2105, Lake City, 32056-2105.

1983 Summer Medical/Surgical Symposium, August 6-7, Holiday Inn Oceanfront, Indialantic. For information: Thomas Netter, M.D., P.O. Box 838, Sebastian 32958, (305) 589-3186.

Current Therapy in the Treatment of Duodenal Ulcers, Aug. 8, Good Samaritan Hospital, W. Palm Beach. For information: John C. Whelton, M.D., P.O. Box 3166, West Palm Bch. 33402, (305) 655-5511.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", August 18, Holiday Inn, Merritt Island. For information: Candace Draper, PIMCO, 354-5910, WATS 1-800-342-8349.

Advanced Trauma Life Support (ACLS), August 25 - 27, Mount Sinai Medical Center, Miami Beach. For information: Rita Goldberg, American College of Surgeons, (813) 936-2414.

Ambulatory Electrocardiography: Clinical Applications, Methodology and Interpretation, August 26-28, Orlando Hyatt, Orlando. For information: Howard Bronson, M.D., International Medical Education Corporation, 64 Inverness Drive E., Englewood, CO 80112, (303) 333-1577.

SEPTEMBER

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", September 1, Tallahassee Hilton, Tallahassee. For information: Candace Draper, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

Workshop on Keratoprsthesis, September 3, Alachua General Hospital, Gainesville. For information: Frank M. Polack, M.D., 720 SW 2nd Avenue, Suite 306, Gainesville 32601, (904) 371-2800.

USF - Sun Bay Community Hospital Surgical Dept. CME Program, September 8, Sun Bay Community Hospital, St. Petersburg. For information: Roy Behnke, M.D., 3030 Sixth Street South, St. Petersburg 33705, (813) 974-2271 or 823-1122.

Advanced Trauma Life Support (ATLS), September 8-10, University of Florida, Gainesville. For information: Rita Goldberg, American College of Surgeons, (813) 936-2414.

Family Practice Update 1983, September 10, Lee Memorial Hospital, Ft. Myers. For information: Jack C. O'Brian, M.D., 3594 Broadway, Ft. Myers, FL, (813) 936-7100.

Advanced Cardiac Life Support Provider Certification, September 10,11,25, Medical Center Hospital, Punta Gorda. For information: F. Wilcoxon, Medical Center Hospital, P.O. Box 1309, Punta Gorda 33951, (813) 639-3131.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", September 1, Holiday Inn, Ft. Myers. For information: Candace Draper, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

C.O.P.D. Update and Asthma, September 15, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Ave., Spring Hill 33526, (904) 683-9440.

Tips, Tricks, Traps and Techniques in Family Practice, September 15-18, Ponce DeLeon Lodge, St. Augustine. For informatio: Thomas Michelsen, M.D., 3599 University Blvd., Suite 400, Jacksonville 32216, (904) 399-1231.

Third Annual Infectious Disease Symposium, September 16 - 17, Quality Inn, Cypress Gardens. For information: Krish B. Shroff, M.D., P.O. Box 2976, Winter Haven 33883, (813) 299-1277.

Diagnosis and Treatment of Impotence — A Medical and Psychiatric Overview, Sept. 29, Lake Hospital of the Palm Beaches, Lake Worth. For information: Jesse J. Kaye, M.D., 1710 4th Avenue North, Lake Worth 33460, (305) 588-7341.

7th Annual Medical Aspects of Aging, September 30-October 1, Gainesville Hilton, Gainesville. For information: James Jernigan, M.D., Box J-233, JHM Health Center, Gainesville 32610, (904) 392-4527.

OCTOBER

Basic, Intermediate and Advanced Hypnosis Workshop, October 6-9, Bahia Mar Hotel, Ft. Lauderdale. For information: Jeffry Winkelman, D.D.S., 4179 North State Road Seven, Fort Lauderdale 33313, (305) 484-4140.

The Professional & Chemical Dependency, Oct. 7, Holiday Inn, Pensacola Beach. For information: B.B. Jordan, M.D., Rt. 2, Box 174, Gulf Breeze 32561.

AAFP Annual Scientific Assembly, October 10-13, Miami Beach Convention Ctr., Miami. For information: Edward Daleske, (816) 333-9700 (Missouri).

Diagnostic and Treatment Dilemmas in Office Psychiatry, October 14, Marriott Hotel, Orlando. For information: Orris O. Rollie, M.D., (305) 896-6611, Ext. 1815.

Profiles in Arthritis, October 15, Marriott Hotel, Orlando. For information: Orris Rollie, M.D., (305) 896-6611 Ext. 1815.

Comprehensive Management of Multiple Sclerosis, October 15, Ft. Laudedale. For information: Ethel Greenberg, 2700 SW 4th Ave., Ft. Lauderdale 33315, (305) 732-9889.

18th Family Practice Review, October 17-21, Dutch Resort Hotel, Lake Buena Vista. For information: L. Crevasse, M.D., (904) 392-3143.

9th Annual Pan American Seminar, October 17-22, Mount Sinai Medical Center, Miami Bch. For information: Frederico R. Justiniani, M.D., MSMC, 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", October 20, Loch Haven Arts Center, Orlando. For info.: Candace Draper, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910,

Cutaneous Signs of Connective Tissue Disorders: Lupus Erythematosis, Dermatomyositis and Scleroderma, Oct. 20, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Ave., Spring Hill 33526, (904) 683-9400.

Advanced Neuroradiology Seminar, October 26-29, Near Disney World, Orlando. For information: Charleen Krissman, 12901 North 30th Street, Tampa 33612, (813) 974-2538.

Advanced Trauma Life Support (ATLS), October 27-28, University of Florida, Gainesville. For information: Rita Goldberg, American College of Surgeons, (813) 936-2414.

24th Workshop in Electrocardiography, October 27-31, Sheraton Sand Key Hotel, Clearwater Beach. For information: Henry Marriott, M.D., Saint Anthony's Hospital, St. Petersburg, (813) 894-0790.

68th Scientific Assembly, Oct. 31-November 3, Diplomat Resort, Hollywood. For information: Ray W. Gifford Jr., M.D., (608) 257-6781.

NOVEMBER

Cardia Arrhythmias, 1983, November 2-4, Mount Siani Medical Center. For information: P. Samet, M.D., 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", Nov. 3, Cedars of Lebanon Medical Ctr., Orlando. For info.: Candace Draper, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

Spinal Deformities, November 6-9, Sheraton Bal Harbour, Bal Harbour. For information: Barry Silverman, M.D., 4300 Alton Rd., Miami Beach 33140, (305) 674-2121.

Non-Cardiac Surgery in the Cardiac Patient, November 11, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Ave., Spring Hill 33526, (904) 683-9400.

Diagnosis and Treatment of Pulmonary Embolism/Deep Vein Thrombosis, Nov. 14, St. Mary's Hospital, West Palm Beach. For information: Gerald J. O'Connor, M.D., St. Mary's Hospital, 901 45th Street, West Palm Beach 33407, (305) 659-1633.

International Symposium on Gynecologic Oncology, Surgery, and Urology, November 14-16, James Knight International Convention Center, Miami. For information: William Little, M.D., University of Miami, (305) 547-6944.

Ninth Annual Course in Behavioral Neurology & Neuropsychology, November 16-19, Sarasota Hyatt, Sarasota. For information: Edward Valenstein, M.D., 2030 N.W. 71st Street, Gainesville 32605.

Medical Malpactice Prevention Seminar — "Anatomy of a Malpractice Case", November 17, Holiday Inn, Tampa. For information: Candace Draper, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

Advanced Trauma Life Support, (ATLS), November 17-18, University of Florida, Gainesville. For information: Rita Goldberg, American College of Surgeons, (813) 936-2414.

33rd Annual Postgraduate Seminar — Deiabetes Mellitus, November 30 - December 2, Mt. Sinai Medical Center, Miami Bch. For information: Lee Goldberg, M.D., 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

DECEMBER

Emergencies in Internal Medicine VI, December 1-5, Frenchman's Reef Hotel, St. Thomas, Virgin Islands. For information: Laurence Gardner, M.D., University of Miami, (305) 325-6337.

Clinical Allergy & Immunology for the Practicing Physician, December 8 - 10, Buena Vista Palace, Lake Buena Vista. For information: Richard F. Lockey, M.D., (813) 972-2000, Ext. 597.

JANUARY 1984

16th Annual Postgraduate Seminar in Pediatric & Adult Urology, January 18, 21, Sheraton Bal Harbour Hotel, Miami Beach. For information: Victor A. Politano, M.D., 6614 Miami Lakes Drive East, Miami Lakes 33014, (305) 687-1367.

Treatable Life Threatening Cardio-Pulmonary Episodes, January 20-21, Diplomat Hotel, Hollywood. For info.: Marvin L. Meitus, M.D., 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

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The Journal is the official publication of the Florida Medical Association. Its purpose and scope include not only the dissemination of scientific information but also communication of FMA activities and reportage of other subject matter relevant to the practice of medicine. Hence, the editors encourage submission of scientific papers (investigative studies, reviews, new technology, case reports); discussions of medical history and ethics, and articles dealing with socioeconomic, governmental, and legal issues as related to medicine.

Manuscripts should be submitted to Daniel B. Nunn, M.D., Editor of *The Journal*, Florida Medical Association, Post Office Box 2411, Jacksonville, Florida 32203, in original and three duplicate copies. Copies should be typewritten and double spaced.

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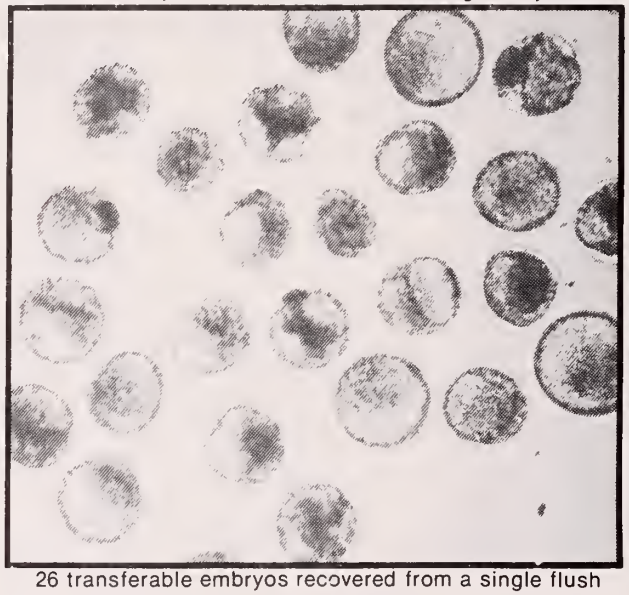
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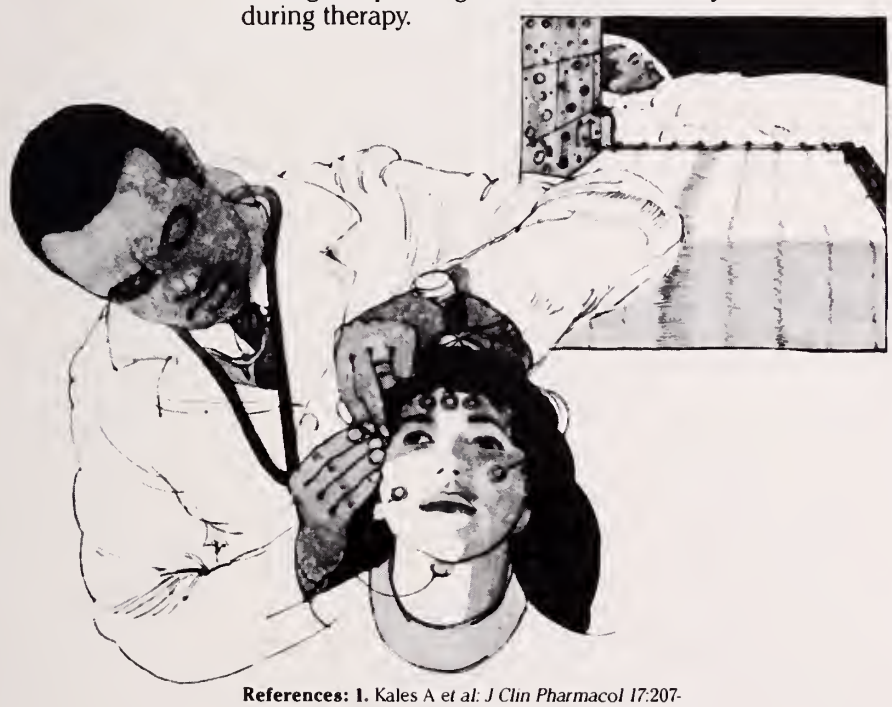
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References: **1.** Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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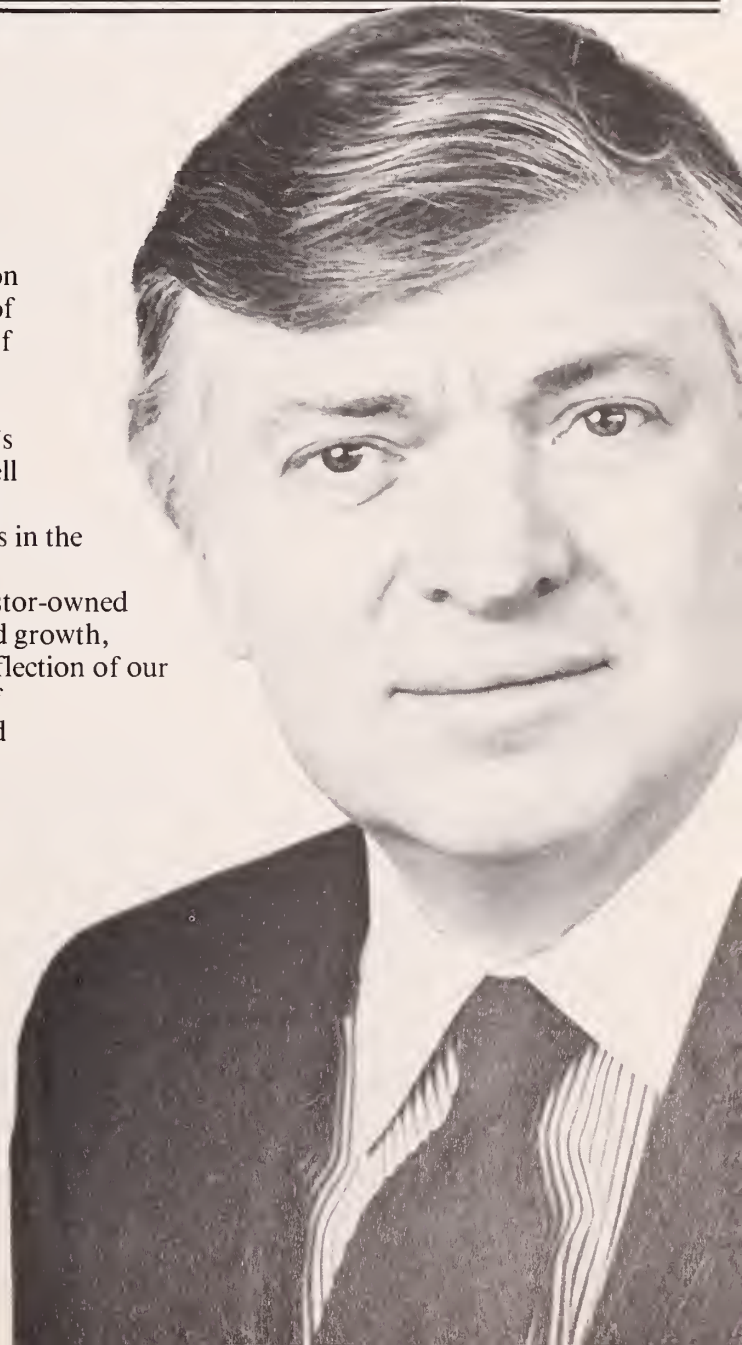
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This month's cover of *The Journal* was designed and painted by Andre J. Renard, M.D., a Jacksonville Plastic Surgeon and Cover Editor. The cover depicts the theme of this Historical Issue which shows a young girl under the influence of Voodoo practitioners while the establishments of law, religion, and medicine look on from the outside in wonderment.

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PRESIDENT'S PAGE

Professional liability: agenda for the future



The 1983 Florida Legislative Session was very difficult. More than 242 individual bills of significance to Florida physicians were introduced with 52 of these bill requiring active involvement by the staff and members of the Florida Medical Association. Not only were the staff and members of the Florida Medical Association often forced to deal with several major issues on the same legislative day, but many of them were debated in different committee meetings at the same time. In addition, there were a number of new legislators due to the reapportionment of the state in 1982. The professional liability issue, the number one priority of the membership of the Florida Medical Association, was held hostage and became a debatable and an interrelated item with almost every other legislative issue involving health care or organized medicine.

You, the membership of the Florida Medical Association, were the most organized and responsive you have ever been. Although the outcome of the professional liability legislation was unsatisfactory, you can each be proud of your individual effort concerning this important issue. The key contact physicians, individual county society members, Florida Medical Association members representing specialty society activities, the Florida Medical Association Auxiliary and the "Legs Alert" auxiliary legislative initiative were unbelievably effective in their efforts in creating legislator and public awareness of the professional liability problem.

The Florida Senate led by Sen. George Kirkpatrick was successful in passing a professional liability bill which would have been very helpful. The Speaker of the Florida House of Representatives, however, was successful in preventing a vote on the professional liability question. Attempts to have the professional liability issue added to the special called session of the Legislature were likewise unsuccessful because of the unresolved education budget and the question concerning taxation for funding the budget for education.

And so, what now? The Florida House of Representatives will have the same speaker next year, a trial attorney who is very unsympathetic to the professional liability issue. The Florida Bar has appointed the special task force for "study" of the professional liability problem. The Gunter Commission appointed to make recommendations to the Governor created no constructive beneficial solution.

The Executive Committee of the Florida Medical Association, the Professional Liability Committee and staff of the Florida Medical Association met on July 11, 1983, and plan another meeting in late August or September to develop the best approach toward a successful resolution of the professional liability problem. Constitutional revisions are under consideration as well as another strong legislative effort.

The most frequent issues which challenged medicine in the last legislative session were the "Bad Doctor" and cost containment of health care —"Doctors are making too much money, anyway".

It is very important for each of us in preparation for future action to be attentive to at least four areas of concern:

1. Provide the best possible medical care and positive communication to the patients we serve.
2. Ensure that our respective staffs represent medicine properly.
3. Become involved and participate actively in community affairs.
4. Know who our legislators are and communicate with them in a positive manner prior to a time when their advocacy is needed in a legislative matter.

We as physicians can represent ourselves better than anyone else. If patients are pleased and confident with our care, if the youth of our society respect our profession and want to follow in our footsteps, and if we, as the most able, make a contribution for the betterment of our community... how can we lose? Let us join in our efforts and bring renewed excitement and respect to our great profession. The many forces that are at work against the practice of medicine cannot be overcome without the effort of each of us and the advocacy and the respect of the public.

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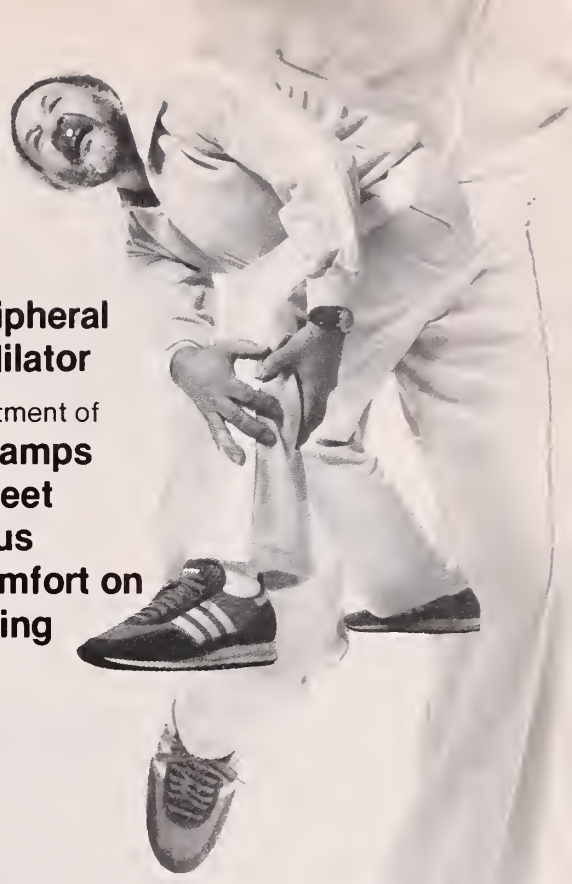
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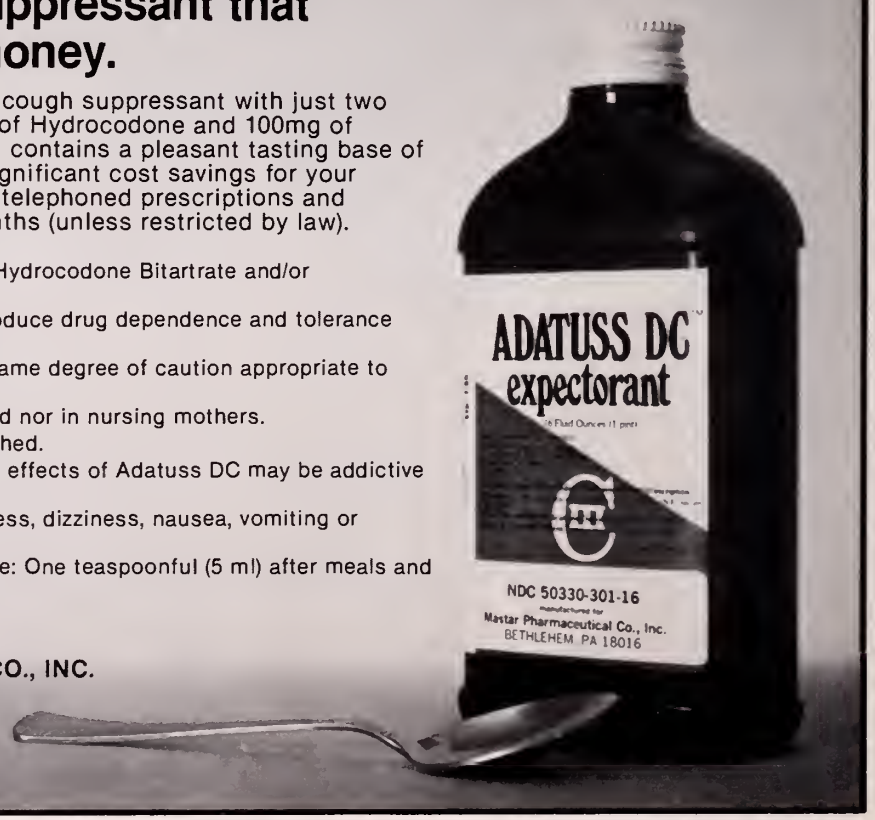
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EDITORIAL

In honor of William M. Straight, M.D.

Once again we are indebted to Dr. William M. Straight, Historical Editor of *The Journal of the Florida Medical Association* and FMA Historian, for providing us with still another outstanding Historical Issue of *The Journal.* To date, Dr. Straight has planned and edited 17 Historical issues (including the Centennial issue) containing a total of 101 articles, the majority of which deal with some aspect of Florida medical history. It is indeed a credit to Dr. Straight's literary talent and knowledge of medical history that the JFMA holds the distinction of being the only state journal to publish an annual historical issue. As a tribute to Bill Straight whose numerous contributions reflect a profound dedication to an accurate and clear recording of medical history, I wish to offer the following precis of Florida medical history as published in the JFMA.

A review of FMA literature (JFMA and its predecessor, *The Proceedings of the FMA)* revealed that the first article on medical history was an address on the medical history of Florida delivered by Dr. T.M. Palmer. This material was published in the 1877 Proceedings. It is truly surprising that 67 years elapsed before another medical historical article was printed in the JFMA. Between January, 1945 and March, 1948, a series of 13 articles written by Dr. Webster Merritt on a history of medicine in Duval County appeared in *The Journal.* Later (July, 1950 - October, 1955), Dr. Merritt contributed six more historical articles dealing with physicians of Alachua County, early St. Augustine, British East Florida and West Florida and a sketch of Dr. Henry Perrine.

In July, 1965, Dr. William Straight published his first article on Florida medical history, "The Frontier Physician of Dade City." By then the stage was set, and in August, 1966, the first "Medical History Number" (a collection of seven articles on Florida medical history) was published. Since then, a JFMA Historical Issue has been published each year with the exception of 1973 when there was not enough time to prepare the issue because of a commitment to publish the FMA Centennial issue in 1974.

Of the 17 historical issues published, nine authors have contributed more than one article: Dr. Mark V. Barrow has written six articles and Dr. James M. Ingram three. Ten doctors' wives have contributed articles with Elizabeth Vickers having authored three. The following members of the Historical Department at the University of Florida have provided a total of six articles: W. Ashby Hammond (3), Jerrell A. Shofner (1), and Todd L. Savitt (2). Fourteen Cuban physicians wrote about their experiences in Cuban medicine and the history of Cuban medicine for the August, 1977 issue. It is notable that Bradford T. Williams contributed an article while a medical student at the University of Florida. Dr. Straight has contributed a total of 22 articles to date in addition to two articles written prior to the establishment of the Historical issues.

By now it should be clearly apparent that Dr. William Straight is the primary moving force in chronicling Florida medical history. Dr. Straight has informed me that his mother was genealogically oriented, and that this may well have influenced his love of history. It is also interesting to note that while attending Johns Hopkins Medical School, he took medical history courses in his spare time. Upon entering private practice in Miami, he utilized slack periods by talking with older physicians and in the course of these conversations began to accumulate material on Florida medical history. During these early years, Dr. Straight edited the bulletin of the Jackson Memorial Hospital. He also served as instructor in history of medicine, teaching a course each year for freshmen and later for third year students until "lack of time and more important courses crowded me out of the curriculum." Dr. Straight has been a member of the JFMA Editorial staff since 1968, and has been listed as Medical History Editor for the period 1968 and 1969 and Historical Editor since January, 1974.

As an editorial colleague of Dr. Straight for the past three and a half years, I would describe the ethos of this distinguished Historical Editor in the following manner. Bill Straight is a highly intelligent, multitalented, personable gentleman who exemplifies a dedicated quest for truth and perfection in the performance of his chosen work.

On behalf of the entire staff of *The Journal of the Florida Medical Association,* I wish to express our sincere gratitude to Bill Straight for the outstanding service he has rendered to both Florida physicians and the medical profession as a whole.

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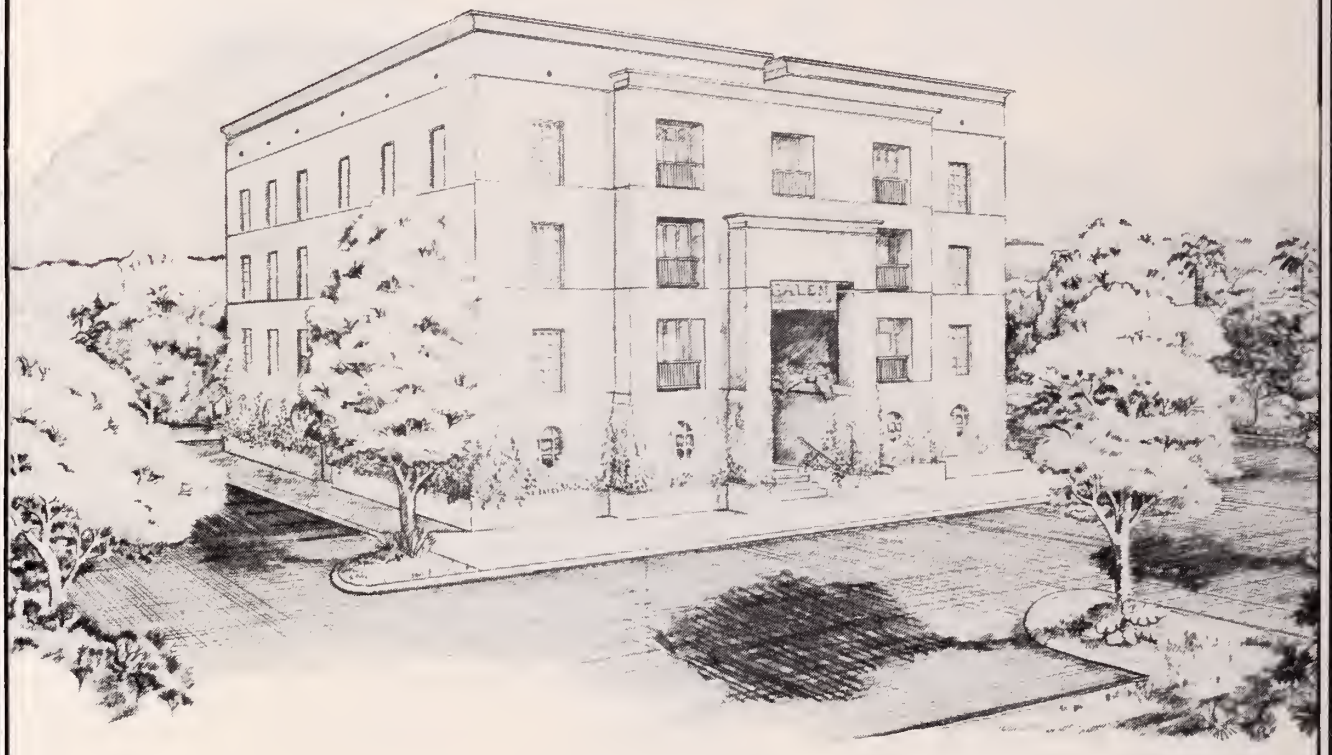
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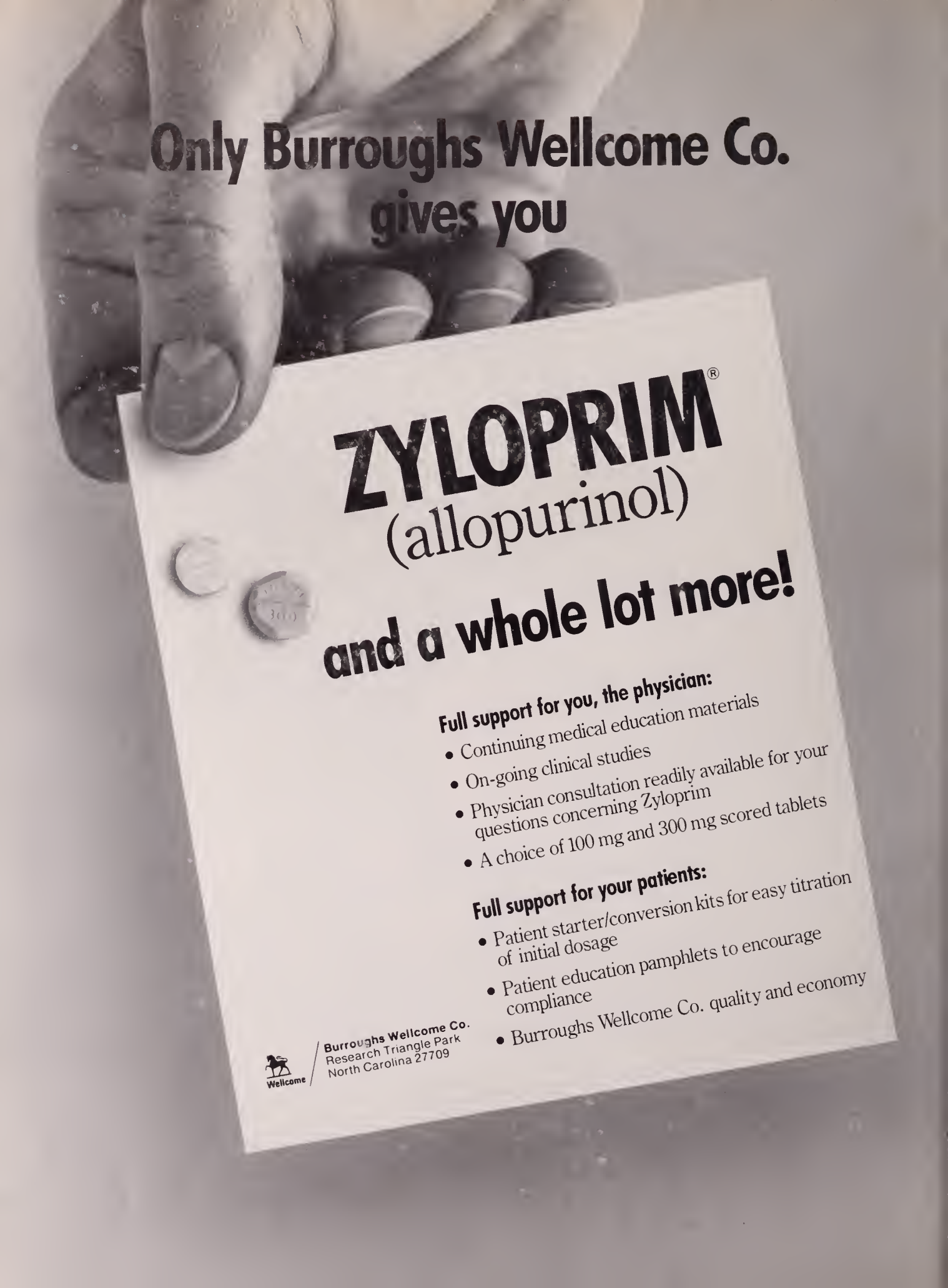
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Historical Issue

William M. Straight, M.D.
Historical Editor

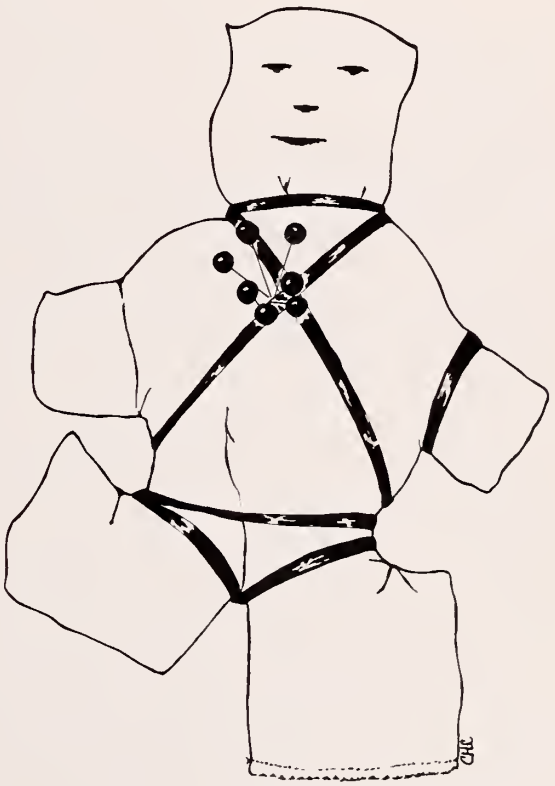
In this issue. . .

Fulfilling a part of the historian's responsibility, recording the present scene for future historians, this issue takes a look at several religio-medical belief systems which flourish in our state today. The lead article introduces the reader to Santeria in its benefical aspects. The second article presents the malefic aspect of Santeria. The third article discusses Voodoo (Hoodoo) as practiced among the Southern blacks and presents some aspects of Haitian Voodoo.

Lest we lose our readers who aren't "into cult medicine," the fourth article presents a biographical sketch of a remarkable nurse who started her career in Pensacola and became world-famous before she died.

Finally, for those who prefer past history, we present an article on the hookworm eradication efforts of the first third of this century in Florida, located in the Worth Repeating secion (page 659).

W.M.S.



Santeria

Mercedes S. Sandoval, Ph.D.

Ochun, the goddess of the river, love, and all sweet things found out that those who were sent to Cuba felt lonely and sad so she decided to go there to dance, comfort, and keep them company.

However, she worried about the long voyage. Full of apprehension, she went to visit her sister Yemanya, owner of the sea, and told her, "Yemanya, I have to cross the sea to go to Cuba and be with my children but I am afraid of the long trip."

Yemanya comforted her, "Don't be afraid, Ochun, I'll take care of you. I will take you to the bottom of the ocean and we will cross it without hazards." Appeased, Ochun said, "You have reassured me, but tell me Yemanya, you who reach all the way to Cuba and visit its shores and beaches, how is Cuba and how are the Cubans?"

Yemanya told Ochun, "Cuba is very much like Africa. There are many coconut and palm trees, it is never cold, and it has peaceful rivers and long tropical nights. However, Ochun, all the Cubans are not black as the people here, some are white and others are mulattoes."

Ochun, still apprehensive, told Yemanya, "I am worried since I am not used to people different from us. I would like you to grant me two wishes. As we voyage toward Cuba I want the waves of the ocean to straighten up my hair just a little bit and its foams to lighten up my skin just a little bit. Thus, when I arrive in Cuba I will be neither black or white. I will be accepted by all the Cubans, blacks, whites, and mulattoes. All of them will be my children."

With her queenly and maternal demeanor Yemanya granted Ochun her two wishes . . . and this is why the Cubans were graced with a Mother who physically resembles all of them.

The virgin of charity . . . Ochun • This appataki (Yoruba word for sacred legend or story) expresses how Afro-Cubans[1] conceptualized the syncretic processes which resulted in emergence of Afro-Cuban religious complexes, in this specific case, Santeria.

Santeria • Santeria is a religious complex, the product of merging African beliefs and rituals, predominantly Yoruba, and Catholic ones as perceived by the Afro-Cubans and their descendants. It is a religion characterized by lack of strict orthodoxy or dogma, and thus homogeneity. As an abstraction, it is derived from different local cults where its priests or Santeros subjectively interpret the beliefs and often introduce changes in ritual and dogma according to their own knowledge and experiences as well as the needs of their followers. These local cults share one common denominator, worship of the oricha-santo.

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The oricha-santo is a new divinity resulting from the syncretism between the Yoruba god or oricha and the Catholic saint. In Cuba the slaves and their descendants identified and associated the African orichas with a Christian mask to fool the Spanish establishment. This enabled them to continue worshipping their ancestral gods. However, during the long process of transculturation, identification of the African god with the saint and use of statues and lithographs of the saints to represent the African gods resulted in the oricha assuming some of the characteristics of the Catholic saint while losing others which did not make them acceptable in the new milieu.

Afro-Cuban pantheon • The supreme god Olodumare-Olofi, who created the universe, presides over the Yoruba and Afro-Cuban pantheons. He personifies all the sublime qualities: omniscience, omnipresence, mercifulness, justice, and eternity which characterize the high gods of other religions. He is, however, a remote god who does not respond to the basic needs of humans and takes little active interest in the affairs of this world. Thus, he divided his power or ache among his children, the orichas.[2]

The orichas are the intermediary power brokers who share with humans their emotions, forms, vices and virtues. They are the personification of the forces of nature (thunder, lightning, the sea) and naked amoral power which can be manifested in positive and negative ways. Some are the patrons of human activities and others own parts of the human body which, when angered, they afflict and, when propitiated, they cure. The orichas are susceptible to human approaches. They can be unconditional allies when adequately propitiated with sacrifices of animals and food but when angered or ignored are unmerciful enemies. Apparently there is a psychic identity between the orichas and those humans they protect, especially those initiated into their cults.

Among the most important of these orichas is Obatala, recognized as King of the Orichas and representative on earth of the high god. He became identified with different Catholic divinities but primarily with Our Lady of Mercy who in Catholic lithographs is dressed in white, the color of Obatala. He is in charge of keeping harmony, justice, peace and order among humans and among the orichas. Obatala, the sculptor of the human body, owns all of its white parts such as the head, the dreams, the thoughts. When enraged he blinds and paralyzes his victims, but also he can cure those suffering from these ailments.

Orunmila or Orunla is the owner of the two most important divination systems or oracles: the Ekuele[3] and the Board of Ifa.[4] Orunla is the god of wisdom and represents firmness and legality. The babalaos, priests dedicated to his cult, preside over important ceremonies and are consulted when there are problems with conflicting oracles or ritual technicalities. Orunla is identified with Saint Francis of Assisi. He is a great counselor and physician but when enraged can cause mental problems.

Eleggua is a mischievous trickster of dangerous character who has the power of ubiquity and serves as the messenger of the gods. Eleggua, the doorman of Orunla, opens the roads (destiny) to benevolent influences or to sickness, misfortune, and death. This capricious, versatile, and elusive oricha apparently is the personification of fate (hope and hopefulness). He is generally identified with the Holy Child of Atocha. This oricha claims the power of "hacer lo que me da la gana" (doing whatever he pleases) which indeed expresses his unpredictable character. Eleggua also manifests himself in the form of Echu where he personifies evil and is used in sorcery and witchcraft.

Chango, identified with Santa Barbara, is one of the most popular orichas. This passionate god who enjoys dancing, drumming, and womanizing, has a boastful character, and personifies the most exhuberant and irresponsible qualities of masculinity. He is the god of thunder, fire, and storms. He is a fierce warrior with a terrible temper capable of great violence who, when enraged, punishes his victims by causing death by fire.

In the Yoruba religion the three most important river goddesses, Oba, Oya and Ochun, are married to Chango. In Cuba, the first two lost their fluvial character. Oba, Saint Catherine of Siena, is a domestic goddess who protects the home. Some say she cures certain forms of paralysis which prevent walking. Oya, identified with Our Lady of Candlemas, is the goddess of lightning and tornadoes and accompanies her husband as the ill wind during thunderstorms. She likes to get into quarrels, enticing her troublesome husband to engage in constant feuds with the god of war, Ogun. Oya is dreaded and respected since she is the owner of the cemetery and controls Iku, death. Thus, when a person is very sick Oya has to be propitiated because if she fails to support him nothing will prevent death. Oya has a terrible temper and punishes, maims and kills people by electrical discharges and accidents which involve storms and winds.

Chango's third wife, Ochun, is among Cubans the the sole owner of the river as well as the goddess of love, honey and all sweet things. This voluptuous, humorous, and witty goddess enjoys dances and parties as does her husband Chango. She became identified with the Virgin of Charity, Catholic patroness of Cuba. Ochun rules over the lower abdomen and genitals and, according to some informants, she also rules over the blood. Thus, when these parts are afflicted she is able to cure them and when enraged she can negatively affect them.

Yemanya, owner of the sea, is the protector of sailors and fishermen. She became identified with the Virgin of Regla, patroness of Havana Harbor. She rules over the intestines and lungs which she can either heal or afflict.

Babalu-Aye is the god of smallpox, gangrene, syphilis, leprosy, skin ailments, and infectious diseases. In Yoruba he is most dreaded but apparently due to his identification with Saint Lazarus, the biblical leper, this oricha is considered most pious and merciful in Cuba. He is a miraculous healer inclined to forgiveness but capable, when angered, of causing all the ailments he controls.

Ogun is the patron of soldiers, butchers, blacksmiths, and other artisans who work with metal tools. He is the owner of metals and is identified with Saint Peter, perhaps because the latter carries the iron keys to heaven. Ogun has a somber personality and enjoys solitude. He is indispensable because in order to officiate in animal sacrifices the priests need to be initiated into his cult. He punishes those who have elicited his anger by causing accidents.

Osain, owner of the magical and medicinal wild plants, is very important. He became identified with Saint Sylvester, who like this oricha, is associated with the wilderness. Osain, who has only one eye, one leg and one arm, must be propitiated so that the wild flora power can be utilized by humans, otherwise they will be rendered powerless.

Ochosi, god of hunting, is a great diviner who lives in the wild bushes. He owns the traps and jails and needs to be propitiated to avoid incarceration. Among drug pushers, thieves, and other people who live at odds with the law, he has great following. He is identified with Saint Norberto.

Oricha Oko is the god of yams and horticulture and settles disputes among the orichas. He became identified with Saint Isidro, patron of farmers. The Ibeyis or child twins are joyful lovable orichas who are the messengers of prosperity and good fortune. They have great magical powers and became identified with Saint Cosmos and Saint Damian.

Aganyu Sola, identified with Saint Christopher, porter of Baby Jesus, is the patron of porters and one of the most powerful orichas.

Even though among the Yoruba of West Africa the cult of the ancestors never enjoyed the same prominence as it did in East Africa, it still had great relevance and was associated with the patrilineal family. It lost importance in Cuba since the slaves and their descendants were permanently severed from their African lineages and the extended family had no opportunity to reorganize. Nevertheless, an undifferentiated cult of the dead, the eguns, prevailed. During all initial ceremonial acts, the babanlas or ancestors of religious lineages, the protector spirits of individuals and the dead in general, are propitiated with offerings, prayers, and songs.

In Santeria, consecrated objects such as stones, necklaces, bracelets, and amulets are believed to be powerful. They are not perceived as mere symbols of the divinities but as material receptacles in which their power resides.

Illness, death • In Santeria, Ano or disease is believed to be caused by both natural and supernatural factors.[5] Santeros do not deny the pathological effects of certain microorganisms as agents of infection nor the effects of degenerative processes. Thus, when their clients are suffering from such ailments they cautiously recommend them to a physician. However, they consider that many diseases are caused by supernatural agents which can also exacerbate the symptomatology and interfere with the physician's treatment of diseases caused by natural agents. Thus, in each case it is necessary to rally the assistance of the orichas and eguns to successfully deal with illness.

Diseases can result from the effects of the following supernatural agents:

1. Diseases can be due to object intrusion. As a result of witchcraft, the objects enter the body and make it sick.
2. Diseases can be caused by imitative or contagious magic. Santeria followers believe that a witch or an enemy can harm them by using pictures or objects closely associated with them. This is based on the universal magical assumptions that "like produces like" and that "anything in contact with an object or person can affect it."
3. Diseases can be due to the loss of one's soul. If a patient's Eleda or guardian angel is bought by an enemy or a witch, it can be used to injure the person.
4. Sometimes diseases are caused by spirit intrusion. In many instances the spirit of a deceased person might be angered with the living due to neglect or because the living wronged them. In other instances the spirits of individuals who, when incarnated, were evil or who died a sudden violent death, can be used by witches to harm a person.
5. Some other diseases are caused by the anger of orichas who either feel neglected by the individual or who because of no apparent reason have turned against him.
6. The evil eye is a most frequent cause of disease. Some people have such powerful eyes that they can harm another person just by gazing at them even when no harm is intended.

Santeros use the divination systems[6] in order to identify the causes of disease as well as the appropriate treatment modality. In most instances these treatment modalities do not exclude medical treatment. They basically consist of magical rituals (prayers and sacrifices) where the powerful and authoritarian performance of the Santero is geared to address the patient's psychic conflicts. By using suggestion and inducing catharsis (and in some instances suggesting rationalizations and projective reliefs), they can ameliorate feelings of insecurity, ambivalence, guilt and fears afflicting the patient. Santeros themselves acknowledge their great ability in dealing with decaimientos (depressions), barrenillos (obsessions), hypochondriacal and phobic reactions.

Due to the great fear Afro-Cubans have of the dead, they behave very respectfully when visiting a cemetery or places where the dead are believed to gather (e.g., silk cotton trees).

Iku or death is a semidivinity whose function is the disposal of life. Iku lives in the cemetery, in empty bottles, and in trash. Iku usually comes searching for victims at night. He is under the jurisdiction of Oya, ruler of lightning and the graveyard. If any mortal or god wants to work with death, he has to make a pact with Oya first. Death can be propitiated and postponed by magical means. Sometimes when a person is critically ill, priests will attempt to deviate the attention of Iku who might have been paid by an enemy or an antagonized oricha.

Afro-Cubans believe that the spirit of the deceased continues to live after death. Even though they believe that goodness in this life will be rewarded by the Supreme Being and evil will be punished, they do not have a clear concept of the ultimate destiny equivalent to the Christian heaven or hell. Still present is the belief in reincarnation, so important in the Yoruba religion, and in the possibility that reincarnation occurs within the family. However, there is not much concern with the afterlife and they see little moral connection between it and our deeds in this world. Santeria believers think the dead continue to inhabit the world of the living. Occasionally they will be visible to the living to bother and frighten them. In order to prevent this, when a person dies the family engages in a number of rituals which are geared to appease his spirit.

Special care is given when a priest or priestess dies. Then the ceremony of "etitu" or quieting down is carried out. A group of priests gather to carry out the wishes of the deceased and those of his oricha. The priests ascertain what the deceased wants done with his otanes, statues, and other sacred objects. They dress the body with the clothing used on the day of initiation and place in the coffin the lock of hair cut off that day. Then the priests carry out the ceremonies designed to cut off all ties with the living. Later Catholic masses are said since reputedly these are most pleasing to the dead.

A ceremony called "el levantamiento del plato" (raising of the dish) takes place on the first anniversary and an animal is sacrificed to the Eleda of the deceased who is definitely bidden farewell.

Santeria and the believers • Believers in Santeria consider that each person has several orichas, spirits or guardian divinities who protect him from all evil. The most important among these protectors is Eleda, owner of the head or ori and the spiritual and divine part of the human being. The head is held sacred since the Eleda resides there.

Eleda must be fed frequently so in return he will protect the individual. The blood of pigeons and white guinea fowl is preferred as a propitiatory sacrifice. It is also customary to freshen the head or ori with coconut water.

If a person does not take proper care of his Eleda it might abandon him or be bought off by an enemy. This is why, when an individual wants to hurt someone, he tries to befriend that person's Eleda, making sacrifices and offerings to it so that the person loses its protection. Sometimes when a person is sleeping, his Eleda leaves his body and goes roaming. Thus, he ought to be cautious while sleeping because an enemy might take the opportunity to harm him. In order to know who one's Eleda is, one has to consult the oracle. The oracle will not only designate the Eleda but will also advise him regarding whether he should be initiated or not.

The majority of believers are not initiated into the worship of their orichas. They are content with worshipping them regularly at the little altars they keep in their own homes. They also attend religious festivals, consult diviners and priests, and frequently make sacrifices to their gods. Thus, initiation is not an equivalent to Christian baptism.

Initiation • Other persons, either because they are called to priesthood or at the request of the Eleda, must go through the initiation ceremony also called asiento or kari ocha. Ordinary participants may become possessed during rituals while the drums in honor of their Eleda are played or on other occasions. If possession should occur, initiation would be advisable since it is a sure sign that the god is claiming the person to his service. In other instances, a person consulting the oracle may be told by an oricha that he should be initiated into his cult. In general, however, the oracle does not advise many believers to go through initiation unless the person shows particular signs such as potential for being a medium or having other similar gifts.

The initiated or iyawos are a class apart because initiation opens the doors to priesthood. However,

not everyone initiated will be a practicing priest. For instance, many persons are initiated due to poor health since the orichas can help in this respect. Others may be initiated because they feel insecure and want to engage supernatural help in contending with their existential problems. Normally these people, after initiation, will only tend their orichas and attend ceremonies with regularity. They will not become diviner-priests nor engage in complicated rituals except those on their own behalf nor serve as godfathers or train neophytes to become Santeros.

It is not infrequent for children to be born with santo. In those instances the oricha has made it known to the mother through trance or divination that the child belongs to him. At other times the oricha might possess the child. In those instances the child might be consecrated during early infancy and even before birth.

In Santeria initiation is an alliance between the believer who accepts the responsibility of serving the oricha and the god who commits himself to protect his devotee throughout all his life.

Initiation is preceded by a long period of apprenticeship geared to instructing the novice in the mythology, the use of paraphernalia and the manner in which rituals concerning the worship of the oricha should be conducted. Santeria is extremely ritualistic and the initiate has to be very familiar with the appropriate way of worship since the gods do not respond to faith but only to rituals and sacrifices. The initiate should also have intimate knowledge of his Eleda because the god in certain occasions will inhabit him through trances and manifest himself to other believers.

Initiation: the necklaces • The long process of apprenticeship is marked by a series of ritual acts which normally begin with the ceremony during which the neophyte receives the necklaces of his and other orichas.

These necklaces or elekes are made by the godfather[7] of the neophyte with beads strung according to the traditional color and number of the oricha. Since each oricha has many different caminos (forms or manifestations) it is important to learn through the oracle which of the caminos is protecting the person so that the necklaces will be strung accordingly. The beads are strung with cotton thread so that the necklaces may absorb the omicro, powerful potion made of magical and medicinal herbs and the blood of sacrificed animals which is used to feed and strengthen them. Once this is done, the necklaces are taken to the river to obtain the power of Ochun. At that time a hen and honey are offered to Ochun. After that ritual immersion, the necklaces are ready to receive the ache or power of the gods. For that purpose they are placed in the sopera (soup tureen) which contains the most sacred stones or otanes which represent the power of the oricha and where blood from the sacrificed animals is offered. Seven days afterwards, the necklaces are ready.

The night before the initiate receives the necklaces he should sleep on a mat in the igbodu or sanctuary and in front of the soperas. If the person receiving the necklaces does not intend to become a practicing priest and is only receiving the necklaces for protection, it is not necessary for him to sleep in the presence of the orichas or to be present when the sacrifice of animals take place.

Before he receives the necklaces, the neophyte is bathed with omiero (special holy water), then he is dressed with brand new white clothes. The used clothing symbolic of his old life is thrown away. Then he is taken to the igbodu where his godfather ritually anoints him and instructs him in the mysteries of the religion, meaning of the ceremony, care of the necklaces, his Eleda, etc. Then the orichas are consulted using the coconut divination system. If they are agreeable to him, he receives the fundamental or basic elekes in the following order: Obatala, Yemanya, Ochun and Chango. If the person's Eleda is another oricha he will also receive that other necklace. Later, on other occasions, the person might receive the necklaces of other orichas to obtain their assistance, protection and power.

Initiation: the warriors • Once the necklaces have been received, the next step in the process of initiation consists in receiving the warrior divinities: Eleggua, Ogun, Ochosi, and Ozun. Only babalaos can prepare and deliver the warriors to the neophyte. Normally, Eleggua is made of cement, a conical head with eyes and mouth made of shells. He is placed alongside the kettle containing Ogun and Ochosi near the door to protect the person from all bad influences. The Ozun is represented by a metal rooster which also acts as a protector of the individual. The day the person receives the warriors he brings the babalao two pigeons and a rooster to be offered to his Eleda and Egun. The animals are supposed to take away all the evil influences.

Initiation: the Asiento •Nowadays the ceremony of asiento or kari ocha lasts seven days. On the first day the herbs, which according to the babalao presiding over the ceremony are needed, are either gathered or purchased. These herbs are used to prepare a potion called the Osain of the Asiento. The herbs of each oricha will be shredded and mixed with water in which otanes or sacred stones, which will embody the oricha and which the person is about to receive, will be washed. Later all those potions will be mixed together with the blood of sacrificed animals. This mixture will be used to bathe the aleyo

for seven consecutive days. The initiate will also drink three sips of that potion each morning for those seven days.

After the initiate receives a ritual purification bath he receives a kobo ori or a rogation to the head where the oricha is going to be received.

The head of the iyawo (initiate) is shaven and marked with yellow, green, and red chalk. He then lies on a mat for several hours while the ceremony proceeds. At the height of the ceremony the godparents raise the otanes of the four fundamental orichas he is receiving, Obatala, Yemanya, Ochun, Chango, plus his Eleda, if different from the aforementioned, and an extra oricha of the opposite sex of his Eleda. During the climax of the ceremony the godmother or iyare holds over his head the stone of the Eleda. At this time the iyawo receives a new African name and he awakens to a new life at the service of his oricha. As he receives the ache or poer of his god a cross is traced on his tongue. Then he eats honey, smoked fish, and the neck of a hen to feed the incarnated god. When the iyawo recovers from the trance he is already married to the god. He attends the numerous sacrifices of animals and drinks their blood.

The second day the iyawo dresses up in full regalia in cloth symbolic of his stage as crowned king or queen and, sitting on a throne, receives all well-wishers. In certain culthouses, the iyawo later that day is presented to the sacred drums. After saluting them, he dances in honor of his oricha. Later, the iyawo attends the banquet of food prepared with the sacrificed animals.

The last day of initiation the iyawo goes to the market with his godmother. He pays her her rights and then he is authorized to take his orichas to his home.

The year following initiation is spent by the iyawo learning more about the religion, following the instructions of his godfathers, and abiding the many taboos he has to respect in order to avoid any trouble during such an eventful period of time.

Priesthood • There are several categories of priests and priestesses in Santeria. In the lower level are the iyawos of recent initiation. Above them are the babalochas and iyalochas, priests and priestesses who are dedicated to the worship of any oricha. Among the latter, those who have greater seniority in terms of years of having been initiated enjoy greater status. Most popular among them are the children of Chango since presumably they are great soothsayers. The children of Obatala have great prestige since they have the capacity and privilege of being possessed by any god because Obatala, their Eleda, is the owner of all the heads.

The most important priests are the babalaos. They are the priests of Orunla, god of wisdom and oracles. They are prominent prophets who can use the highest instruments of divination. They preside over all initiation ceremonies and funerals. They are consulted in cases of contradictory oracles or whenever there is doubt concerning rituals or dogma. They are the highest authority since their Eleda is the god to whom all the secrets were entrusted by the Supreme Deity. The office and dignity of babalaos is reserved to men; women cannot be babalaos.

Priests in Santeria perform four very important functions: officiators in worship ceremonies, medicine men, soothsayers, and witch-hunters. Thus, they care for their own culthouses and preside over the rites which are celebrated there. They also train the individuals who are going to be initiated into the mysteries of this religion. As medicine men, they must be knowledgeable of the use of the divination systems in order to be able to diagnose diseases and prescribe remedies. They need to know how to prepare the medicinal beverages made from a concoction of herbs, weeds, and leaves as well as how animals and other offerings should be given to the gods. As medicine men they also need to prepare amulets and love potions. Generally Santeros do not use their power for harmful purposes since reputedly they feel repulsion for witches. Even though they know the secrets of sorcery, witchcraft, and black magic, they are not supposed to use them unless it is deemed necessary, for example, to protect a client who has been harmed by them. The Santero can also show the client how to get rid of bad influences but not necessarily by recommending offensive magical measures against an enemy.

The priests of Santeria are also fortune tellers who have at their service several types of oracles. Santeros use the "coconuts" and the "diloggun" which consists of cowrie shells. The two highest divination systems, opele and Board of Ifa, are reserved for the babalaos.

Cult centers, effigies, drums, sacrifices • Worship does not usually take place in buildings especially erected for such purposes. Most of the time the cult centers are within the confines of the priests' houses. The part of the house dedicated to worship cannot be used for household matters.

The house-temple is called ile ocha (Yoruba: ile = house and ocha = oricha, sacred). In these cult centers one can identify three important parts. The igbodu or sanctuary is where all sacred and powerful objects are kept (such as the otanes and statues) and where the hermetic esoteric rites are celebrated. The floor is covered with mats where the food, fruits, sacrifices, and other offerings are placed. The eya aranla is the large room where the faithful meet and

where the most liturgical dancing and singing takes place. The iban balo is the court or patio where the public ceremonies are held.

The orichas are not only represented by chromolithographs and statues of the Catholic saints but also by carved wooden images similar to the ones still used in Africa. Each divinity normally owns several artifacts which symbolize him. For example, iron objects are the symbols of Ogun, god of war and metals.

Drums are sacred to the Afro-Cubans because the orichas speak through them. They are more than musical instruments which mark the beat at religious festivals. They are seen as the true voices of the gods and spirits.

Regular drums are called ilu but once consecrated they are called ana. At that time they receive a name since the sacred drum are perceived as having a soul which needs to be supplicated with prayers and sacrifices to renovate their supernatural powers and secrets. Each drum has two openings covered with skins of male goats or deer. The wood used in their manufacture should be cut by an Olosain who knows how to deal with wild flora. They are generally made of cedar, palm trees, and mahogany.

Drum festivals should be offered to the gods on their anniversaries, whenever a favor is requested from them, when the favor is granted, and at any other time the oracle indicates.

In Cuba, drums were used in practically every religious ceremony. Nowadays they are not used so often, perhaps due to the negative response they got from neighbors or to the scarcity of consecrated drums and drummers.

Sacrifices are an intrinsic part of the religious practices characteristic of Santeria. Cooked food, fruits and animals are frequently offered to the orichas and spirits to keep them happy, feed them, and to strengthen their powers. Each oricha has its own taste and thus should be fed accordingly. The spirits of the dead also show preference for certain foods. The belief in the efficacy of sacrifices is based in the animistic assumption that supernatural beings or powers share man's perceptions, feelings, and emotions. Thus, the believer gives up, denies himself, or even destroys something of value in order to please the supernatural forces or beings with these offerings and thus strengthen the relationship.

Offerings and sacrifices are meant to fulfill different functions and achieve different goals. In many instances they are used as a means to establish a state of communion between the supernatural entity and humans. In such cases, the believers consume part of the offerings given to the gods. In many instances, offerings are gifts to express gratitude or even as votive offerings to return a favor. Yet, at other times they are used to propitiate or appease supernatural beings, serving as scapegoats or substitutes offered to them in lieu of the person who has elicited their rage. In these instances, sacrificial offerings are not consumed but either burnt or buried. Sacrifices are also offered to enhance the power of the divinities or to fix supernatural power to a specific object, amulet, or place. Also, sacrifices are offered to prevent calamities and, especially in the case of animals, are turned into messengers to the gods. Animals which are most commonly offered to the orichas are fowl, goats, ducks and pigeons. Sometimes calves, deer, and opossum are offered to the gods.

Santeria in a technological society • It was many years before Ochun and other African gods who had followed their children to Cuba undertook a new voyage and moved to other unknown regions of the world. This long pilgrimage was triggered by the needs of their believers to count on their aid, comfort, and counsel in their new homes. This time, the children they followed were Cubans predominantly of European extraction, some mulattoes and Blacks. This resettlement served as a vehicle for these African divinities to be known by other ethnic and national groups. By means of the Cuban diaspora, the African gods have gained a following among other Hispanic Americans within and outside the United States as well as among some Black Americans. As a result of their accommodation to different environments and to the new needs and perceptions of their believers, some of their attributes, characteristics, roles, functions, and rituals have undergone changes and reinterpretations which have enabled these African gods to adapt again to new situations and demands.

In Africa, the Yoruba religion fulfilled all the functions that religious complexes do in pre-urban and early urban societies.[8] In Cuba, and much later in the United States, these functions dramatically changed. While some were highly emphasized, others lost ground to other institutions which could more adequately fulfill those needs and functions.

For example, in Africa, the Yoruba religion provided explanations about the nature of phenomena for which the group had no pragmatic explanation. Myths explaining the origin of man, the universe, and farming abound in the Yoruba religion. This function of religion which provided answers and thus control of the group lost ground in Cuba and in the United States when confronted with secular explanations based on scientific and technical advances. Thus these myths are taught and repeated as part of the cultural heritage but lack the credibility they enjoyed in the past.

Something similar happened to two other important functions of religion: enculturation and ethical device. Religion traditionally has served to help maintain social order and control by offering supernatural assistance in the process of teaching the members of a group acceptable behavioral patterns. In Cuba the African religion could not successfully compete with institutionalized education or western morality, thus it accommodated itself well to a new mulatto morality. It lacked the rigidity of Christianity but at least paid lip service to it.

Three other important functions of religion gained importance in Cuba and the United States after undergoing reinterpretation and changes. Religion's function as a social support system in Cuba apparently was enhanced because religion became the core institution around which the slaves and their descendants rallied. Through religion they were able to preserve their original identity, language, music, and history. Much later in Miami this function has been enhanced in a different fashion. Santeria cult houses consisting of the Santero, his godchildren and his clients have turned into surrogate families for clients who are suffering from alienation, loss, and separation from their real families. Many Santeria clients spend practically every weekend and often several hours a day in the home of their Santero where they receive much moral and sometimes economic support. Members of cult houses sometimes form an informal economic network for providing other members with goods and services free of charge or at cost.

The function of religion as a health care system expanded after being reinterpreted in both Cuba and the United States. In colonial times in Cuba this function attracted non-African participation. Medical services 200 years ago were usually not available to the majority of the population and even when available they were not especially effective. In many instances relatives of a sick white person might attempt to recruit the help of unorthodox healers, including African witch doctors. If the treatment was effective, grateful clients and their relatives granted these religious form credibility and respect which would elicit their continued patronage and participation in crisis situations.

When the European medical model was made available to large numbers of the urban masses, a change occurred in the health care function of Santeria. Many clients suffering from illnesses due to organic agents were treated by physicians. Those who went to the Santero of their own accord often were advised to also consult a physician. Thus Santeros have become content with their new role of assisting physicians in dealing with the physical ailments of their clients by intervening with gods and spirits to enhance the physician's ability to diagnose and treat these ailments. They prepare fewer of the medicinal potions which in Africa and colonial times were such an important part of treatment. Santeros, ever searching for success, do not suffer many feelings of dissonance in recommending that their clients visit and consult physicians. As a result, Santeros began dealing more with clients who were suffering from psychosomatic and chronic ailments, those which are more resistant to medical treatment. Still, in these cases clients are recommended to follow their doctor's instructions while the Santero ensures supernatural support.

Another function of religion which gained a lot of ground both in Cuba and the United States is the one through which participants can gain access to control of the supernatural through magical manipulation and know-how. It is difficult to imagine a situation of greater lack of control and mastery than the one experienced by the African people who were kidnapped from their homeland and sent in chains to an environment unknown to them as slaves of people of a different language and color. This traumatic experience must have brought insurmountable feelings of powerlessness, lack of control, probably bordering on paranoia. Their descendants, fairing only slightly better, also shared with their ancestors these perceptions of subjugation to unknown forces. These feelings of subjugation were also shared by a great number of the white population, since the Cuban colonial experience was not conducive to participation in either political or economic decision making. Unemployment, which in Cuba was endemic, poverty and political instability were also situations conducive to reliance on highly manipulative magical systems in search of control. Other white people experiencing lack of control such as unloved lovers, politicians, athletes, and actors who were always in doubt of receiving the acceptance they needed would go to Santeros seeking amulets which would free them from bad luck, from the ill effects of the evil eye, or would hopefully expedite emotional, social, and economic success.

The political and economic experience of the people in the Republic of Cuba, full of incertitude, enhanced even further those feelings of subjugation to supernatural forces beyond their control.

Thus, this religious complex, originally prevalent only among narrow segments of the Cuban population of Yoruba extraction, expanded its influence to other segments who were in need of magical control or medical-magical treatment of illness. Even so in prerevolutionary Cuba, Santeria remained a cult organization catering primarily to Blacks, educationally deprived people, and those of low social status and was completely unknown in many regions of the island.

The revolutionary process which started in the fifties followed by loss, exile, persecution, culture shock, and acculturation has fostered the conditions of powerlessness, paranoid delusions, subjugation, and ambivalence. As emotional and mental problems, as well as psychosomatic disorders, become more prevalent, individuals increase their attempts through magical means to gain control of their lives.

It is interesting to note how atheistic, materialistic, communistic Cuba affected the majority of the population which remained in the island in a similar fashion, and how the feelings of powerlessness have also resulted in the resurgence of a greater reliance on magical systems. The "Marielitos"[9] who arrived in Florida in 1980 rely on Santeria and other magical religious systems to a greater extent than do earlier immigrants.

The process triggered by revolution in Cuba and the movement of Cubans within the island to the United States and to other nations served as the catalyst for dissemination of this religion among Cubans who had never before been in contact with it and among other Latin nationals.

The subversion of values which took place among Cubans remaining on the island as well as those who emigrated, and the fact that Cuba's former pacesetters lost prestige and power as a result of the revolution, helped de-emphasize the low-class stigma associated with Santeria as Cubans of low socioeconomic strata gained higher status both on the island and in exile. However, as new professional, managerial upper and middle classes emerge outside the island, it is to be foreseen that Santeria again will be associated with people of low socioeconomic status.

The situation of Santeria in the island is of great interest. The communist establishment in Cuba apparently is in a bind. Among followers of an essentially materialistic and atheistic dogma, there is no room for tolerance of mystical or magical world views as has been demonstrated by the subtle and not-so-subtle persecutions experienced by Christian denominations in Cuba. In the case of Santeria, a religious complex associated with the African culture Cuban communists have conveniently attempted to emphasize, it is promoted in an effort to capitalize on their imperialistic adventures on that continent. The government finds itself in the situation of sponsoring plays and festivals around Santeria themes as well as making available to its followers through the Defense Committees those articles necessary for its practice while grudgingly lamenting the ill-effects that a magical world view has on the emergence of the loyal, revolutionary spirit.

In any case, Santeria has given support to those experiencing powerlessness, loss, and ambivalence by placing at their disposal magical means of communication, for advice, and control of the supernatural forces. It also helps them rally supernatural forces to assist them in solving daily crises in the two societies which are perceived as basically amoral. Santeria, by placing so much emphasis on the way supernatural forces affect our lives, has helped some guilt-ridden people to free themselves from assuming responsibility for their own failures and confusion.

A religious system which shares the view that people have of society as being present-oriented, materialistic, and amoral, where few are actually concerned with the afterlife, has much to offer in terms of support, rationalization and coping skills. A religion that recognizes the existence of a soul battered by supernatural forces which affect fortune, misfortune, illness, and health, and assists that soul to deal with these forces, has lots to offer to members of a society who still cling to an animistic concept of man officially denied by professional and scientific circles.

References

1. The term Afro-Cuban is used in this paper to designate those Cubans whether black, mulattoes or white who practice some of the religious complexes of African origin which flourished in Cuba
2. For more information concerning the dogma and ritual of Santeria see: Cabrera, Lydia, El Monte, Havana, Cuba, Editorial Chichenku, 1954; Ortiz, Fernando, La Africani de la Musica Folklorica de Cuba, La Habana, Cuba, Ministerio de Educacion, Direccion de Cultura, 1950; Sandoval, Mercedes Cros, La Religion Afrocubana, Madrid, Editorial Playor, 1975.
3. The Ekuele is a divination instrument consisting of necklaces with seeds and pieces of metal chained together
4. Board of Ifa is a divination instrument consisting of a wooden board and 16 nuts.
5. For more information concerning concepts, diagnoses and treatment of disease among Afro-Cubans see: Sandoval, Mercedes, Santeria, AfroCuban Concepts of Disease and Its Treatment in Miami, Journal of Operational Psychiatry, 8(2), 1977: S2-63; Sandoval, Mercedes, Santeria as a Mental Health Care System, Social Science and Medicine, 138, 1979:137-151
6. Coconut and Diloggun are two divination instruments which can be used by all Santeros. The first one consists of four pieces of coconut and the latter one of 16 cowrie shells.
7. Godfather or godmother are the terms that are used for the Santero or Santera who is in charge of training a neophyte. The power of the gods is bestowed in the sacramented object of their godchildren
8. For more information concerning Santeria as a mental health care system see: Sandoval, Mercedes, Santeria, AfroCuban Concepts of Disease and Its Treatment in Miami, Journal of Operational Psychiatry, 8(2), 1977:S2-63; Sandoval, Mercedes, Santeria as a Mental Health Care System, Social Science and Medicine, 138, 1979: 137-151; Halifax, Joan, and Weidman, Hazel, Religion as a Mediating Institution in Acculturation: The Case of Santeria in Greater Miami, in Cox, Richard H. (Ed.): Religious Systems and Psychotherapy, Springfield, Ill., Charles C. Thomas, 1973, pp. 319-331
9. Marielito is the term used to refer to the Cubans who arrived via the boatlift during 1980. The term (derived from the word Mariel which is the name of the embarcation port) carries some negative connotations of laziness, irresponsibility, and antisocial behavior

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Brujeria: Manifestations of Palo Mayombe in South Florida

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In a broad sense, the term "brujeria" refers to witchcraft or malevolent sorcery associated with Afro-Latin religious systems. In Santeria, for example, various spells and orishas (deities) may be invoked for either good or evil purposes.[1] In the Santeria pantheon, Eshu (Echu) is regarded as a personification of Eleggua most closely resembling Satan[1,2] and Chiyidi (god of nightmares) is an evil entity invoked to torture enemies.[3] In Santeria there are spells which may be used to harm enemies, create enmity, and dissipate evil spells.[4] Practitioners believe that certain life problems or psychosomatic complaints may be the result of possession by an evil spirit sent by an enemy[1] or that the guardian spirit (Eleda) of a person is "bought" by a witch.[5] Such problems may also be attributed to preternatural object intrusion or contagious magic inflicted on one person by another.[5] Because Santeria does not address a specific moral code as in the Judeo-Christian tradition, it is frequently found in association with criminal activities. Drug dealers, for example, not infrequently have elaborate statues and other depictions of Santeria in their homes, and Ochosi (god of hunting and owner of traps) is propitiated and honored among some criminal and socially deviant groups to avoid incarceration or obtain release from jail.[1] Hence, Santeria, while predominantely a white or neutral magic religion, does have a component of malevolent sorcery and is invoked by criminal elements. This should not be construed, however, to suggest that Santeria promotes malevolent or criminal activities, but that it may simply be used by such persons to promote their already established intentions.

In contrast to Santeria which is predominantly used for good or neutral purposes, Palo Mayombe is primarily oriented towards malevolent sorcery. While many depictions and symbols in Palo Mayombe appear identical to Santeria, devotion to brujeria, the use of human remains, and other features distinguish this cult from other Afro-Caribbean religions.

Origin of Palo Mayombe • The cult of Palo Mayombe, also known as Palo Monte, originates from the Congo (Bantu) region of Africa[6,7] and includes such African cultures as the Loango, the Mondongo, and the Mosondi.[7] Like the slaves obtained from the Yoruba culture of West Africa (which gave rise to Santeria), the Congo slaves tried to preserve their heritage by assimilating certain features of the Spanish colonialist culture and Catholicism. Also, they were receptive to the myths and rituals of Yoruba origin and assimilated features typical of Santeria. Palo Mayombe, therefore, may be regarded as a religion of Congo origin strongly modified by Spanish colonialism with syncretic depictions of both the Catholic saints and the orishas of Yoruba origin. This syncretism is depicted in Table 1. As with the orishas of Santeria, there are various other mpungus (gods) in Palo Mayombe not depicted in Table 1. In Palo Mayombe, the supreme deity or creator is variously known as Guindoki, Chamalongo, and Nsambi, and is the equivalent of Olofi/Olodumare in Santeria.

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Table 1. — The Supernatural.

Nkitas / Mpungus (gods) of Palo Mayombe* (Congo Origin)	Syncretism with Orishas / Santos of Santeria (Yoruba Origin)	Notes	Christian Syncretism
Tata Legua, Nkuyu	Eleggua'	A trickster god who controls roads, gates and communication. **Symbols:** Alternating red and black beads, clay image with face made of cowrie shells.	Holy Guardian Angel Christ Child, St. Anthony of Padua
Mama Nsasi, Nkita Nkitan Kitan	Chango'	A warrior deity who controls thunder, lightning and fire. **Symbols:** Alternating red and white beads, the sword, double-edged axe.	Saint Barbara
Mama Kengue, Yola, Yeye	Obatala'	The oldest son of Olodumare and hence the king of the santos; a source of wisdom, purity and peace. **Symbols:** White beads (sometimes with an occasional red bead), the pearl, white objects and white clothing.	Our Lady of Mercy, Holy Eucharist, Resurrected Christ
Mpunga Mama Wanga Choya Wengue	Oshun'	The third wife of Chango; controls money, love, honey and all sweet things, makes marriages. **Symbols:** Alternating white and yellow beads or all yellow beads, mirrors, seashells, copper, gold.	Our Lady of Charity
Mboma Mama Kalunga, Mama Umba, Mbumba Mamba	Yemanya'	The primordial mother of the santos who owns the seas and protects womanhood; patroness of sailors and fishermen. **Symbols:** Alternating white and blue beads; Christian syncretic depiction is that of a black madonna holding a white Christchild.	Our Lady of Regla
Pengun Futila, Tata Funde	Babalu'-Aye'	A patron of the sick, especially of skin diseases. **Symbols:** Alternating white and purple beads, purple objects, cigars, pennies, glasses of water; Christian syncretic depiction is that of an old man on crutches with leper sores on his legs and accompanied by dogs.	St. Lazarus
Zarabanda, Pungo Dibudi	Oggun'	A warrior deity who owns the metals and weapons. **Symbols:** Alternating black and green beads, iron objects (including horseshoes and railroad spikes), chain and pendants of agricultural tools.	St. Peter

*Corroborated information obtained from Dr. Lydia Cabrera[13] and field informants.

Because of the acculturative and syncretic processes which took place over several centuries, the rituals and myths of Palo Mayombe are frequently associated with the practitioners of Santeria. Indeed, many Santeros (initiated Santeria practitioners or priests) claim they have also been "Rayado en Palo" (initiated into the Palo Mayombe cult). Religious paraphernalia typical of Santeria and those characteristic of Palo Mayombe may be found in the same home, but in different locations of the residence. Despite the historical and symbolic associations with Santeria, Palo Mayombe has certain distinguishing features. Most importantly, the myths and rituals of Palo Mayombe are centered about the spirit of the dead (kiyumba). In most instances, the magic is used to inflict misfortune (insanity, divorce, etc.) or death upon an enemy or the enemy of a client.[8]

Practitioners of Palo Mayombe are referred to as Paleros or Mayomberos. The term Padre (or Madre) Nkisi is commonly used to address the Palero (or Palera) and translates to father or mother of the nkitas (equivalent to the santos or orishas in Santeria) which are the spirits mediating good and evil in the natural world. Paleros who perform benevolent or neutral magic are sometimes referred to as Mayomberos Christianos (Christian Mayomberos) while those engaged in malevolent sorcery are referred to as Mayomberos Judios (Jewish Mayomberos). The initiation of a mayombero involves a series of purifying rituals which includes the wearing of clothing that has been buried (by the initiate) in a grave three weeks earlier, and culminates in the presentation of a scepter (kisingue) made of a human tibia wrapped in a black cloth to rule over the powers of darkness.[9]

The nganga • The ritual life of Palo Mayombe centers about the nganga (Fig. 1, page 634a), often referred to as the prenda ("jewel"). This sacred cauldron contains human bones (invariably a human skull, with or without long bones as well), sticks from the forest or wood ("palos de monte"), various herbs, feathers, railroad spikes, animal bones (skulls or other bones of various birds and sometimes turtles), small iron agricultural tools (rakes, picks, hoes, etc.), sacred stones, and other items which may be of special significance to the palero. The most important of these items are the sacred stones and the human skull. The stones are ritually "fed" when the nganga is offered blood in a ceremony called simbankisi. The skull is specifically referred to as the kiyumba, meaning spiritual substance or intelligence of the dead. The "father" or "mother" of the nganga interacts with his/her kiyumba by "feeding," "punishing" or making the nganga "give birth" to initiates or new paleros. The skulls may be obtained from various sources.[11,12] However, some mayomberos insist on a skull in which the brain is still present so the kiyumba can think and act better.[12]

The nganga contains other items which have ritual significance. Gunpowder "fula" is used for divination purposes by placing small amounts in a row and observing how they burn. Sulfur is commonly used as an incense during the practice of malevolent sorcery. Azogue (quicksilver or mercury) is another important component since its ease of flow and movement is believed to vitalize and energize the nganga.[13] Mercury is also used in conjunction with vulture feathers and the kiyumba to produce madness in an enemy. Ashes (mpolo banso) form another integral part of the nganga and are used for purification (when rubbed on the hands) and for defensive or aggressive magic.

The equivalent term for a trabajo (Santeria magic spell) in Palo Mayombe is nsarandas. They frequently center about the nganga and may range from simple to highly complex rituals designed to inflict harm on an individual.

Manifestations of Palo Mayombe in South Florida predominately center about the discovery (by accident or by design) of skulls, ngangas and, on rare occasions, grave robbings.[10,11]

Manifestations of Palo Mayombe in South Florida • — **Case 1** — Passersby discovered a skull with three pennies and a nickle lying on a gravel bed between railroad tracks. The skull (Fig. 2) was that of a black male, with teeth in fairly good repair and with no dental work. The left eye socket was packed with dirt as was the interior of the skull. A rust stain covered the left supraorbital ridge and extended onto the frontal bone. Just above the left mastoid region was a red stain (not blood). The dirt inside the skull contained a single cowrie shell.



Fig. 2. — Skull with cowrie shell found on railroad tracks (Case 1).

Comment • The anthropologic features of this particular skull suggest that it was brought into this country surreptitiously in that it did not appear to be that of a native Black American. The presence of rust and impacted dirt is strongly indicative that the skull was probably used in the context of an nganga. Its location by the railroad tracks is symbolic of Zarabanda (a warrior mpungu who owns metals and railroad tracks and is the equivalent of Oggun in Santeria). The coins found in association with the skull are also typical and apparently represent a symbolic payment to the nkitas. It is uncertain as to why the skull was abandoned. Quite possibly, it was part of a dismantling of an nganga due to the death or relinquishment of a palero.

Case 2 — The police department responded to an anonymous telephone call indicating a shooting had taken place on a small farm. During their search of the premises they encountered an abandoned shack in which there was a ritual altar containing human bones. The altar (Fig. 3) was composed of an iron cauldron filled with dirt into which were thrust 21 bamboo sticks and a crucifix (in the back). A knife was embedded in a stick at the front of the cauldron. The center of the cauldron contained an artificial human skull which appeared to be composed of plaster or cement, deer antlers, and a human femur. A genuine human skull to the left of the cauldron appeared to be that of a relatively young black male. Another artificial skull (made of cement) was to the right of the cauldron and contained a red stone in the eye socket. In front of this cauldron was a small wooden coffin which contained broken bits of a partially burned candle, a brown bottle containing a brown and white creamy liquid, and a plastic bag containing a hemostat, scalpel handle and an empty plastic vial. In front of this coffin-like box was a small pottery dish containing dirt and four cowrie shells. The backs of three of these shells had been cut off and the fourth had a cross etched on its surface (Fig. 4). Nearby, toward the rear of the shack was a machete and near the cauldron were two statues of unknown personages. Near the dish containing the cowrie shells were several strands of beads which included alternating red and white beads, black and red beads, blue and white beads, and a strand of yellow beads.



Fig. 3. — Nganga discovered accidentally in a farm shack. The crucifix suggests it belongs to Mayombero Christiano (Case 2).



Fig. 4. — Cowrie shells found with the nganga in Fig. 3 (Case 2).

Comment • The owner of this altar was subsequently interviewed by the authors. He is a 48-year-old Cuban. At age 17 he suffered from epilepsy which did not respond to either medical treatment or the intervention of Santeros. His father finally took him to a Palera who cured his affliction with a ceremony which included making multiple incisions on his body (predominantly on the front and back of both shoulders, the thighs, the calves, and feet) and covering these with 21 pieces of wood. He was left alone over night and since that time has not had any recurrences of the epileptic seizures. He displayed to us the scars from that ceremony. Since then he has been a devotee of Palo Mayombe but is not a Palero (priest). The man indicated that the Palo Mayombe cult was separate and distinct from Santeria although, in his opinion, there has been a blending of the two religions in recent years. He further indicated that there were two separate cults of Palo Mayombe, one dealing entirely with evil magic (the majority) and the other dealing with white magic. According to this informant, the white magic altar always has a crucifix associated with it. The number 21, he indicated, is symbolic of the Palo Mayombe cult but its significance was not clear to him (or he was not willing to divulge its significance). He explained that the surgical instruments were there to symbolize success in recovery from surgery of a particular individual, and the cowrie shells were used for divination purposes. He claimed to have purchased the skull and femur from a dentist in another state. Anthropologically the skull was consistent with that of East Indian origin which would be typical of a medical specimen. He explained that the femur symbolized walking and travel, symbolic of Tata Legua (the equivalent of Eleggua, owner of the roads in Santeria). The tibia is supposed to possess the real significance in this regard, but lacking a tibia he used the femur.

Comment • This case would appear consistent with the Mayombero Christiano sect of Palo Mayombe. It is interesting that in this particular nganga no railroad spikes were found, which is said to signify malevolent sorcery. The syncretism with the Santeria religion is evident in the strands of colored beads found in association with the altar as well as other artifacts commonly observed with Santeria (e.g. the cowrie shells and the deer antlers). The incorporation of artifacts of Christianity (the crucifix) reflects the additional syncretism or acculturation with Catholicism.

Case 3 — The police entered a domicile to serve an arrest warrant and discovered an altar containing a human skull. A search of the premises indicated numerous symbols of Santeria in the living room, including bowls and statues of various saints. In a closet were numerous artifacts symbolic of the santos Yemanya, Eleggua and Lazarus. In a separate room were two cauldrons. The large one contained machetes, railroad spikes, packages of cigars, feathers and some dead birds resembling pigeons. In the center of this was a human skull covered with blood and feathers (Fig. 5, page 634a). On the tope of the skull was the stub of a white

candle. A silver chain crisscrossed in front of the skull. The smaller cauldron had similar items and a white pan with pieces of broken coconut shell and some corn. Associated with the larger cauldron were strands of alternating red and white beads.

Comment • The wall behind these cauldrons was covered with blood which the resident indicated was that from a pig. The skull, said to have been purchased in a local botanica, had anthropological features suggestive of East Indian origin or possibly those of a young Black female. The story of the skull having been purchased in a botanica (local religious goods store catering to Santeria) has been previously encountered.[10] It is of interest that although the altars of Palo Mayombe were in one room, the majority of the dedications to Santeria were in other rooms. Nonetheless, some symbolism of Santeria was present in the Palo Mayombe altars. These included the cigars (symbolic of Lazarus), the colored beads (symbolic of Santa Barbara), and the sacrificial birds used to propitiate the orishas.

Case 4 — The police were notified that a skull had been found on the grounds of a cemetery along with "voodoo" paraphernalia. The items were scattered near a cemetery wall. The skull appeared to be that of an elderly female probably of East Indian origin. The teeth were worn and the mandible was atrophic. The calvarium was covered with red and white wax, blood, and adherent avian feathers. The skull was lying on a red and white cloth (Fig. 6, see page 634a) and nearby was a red and white candle. The following materials were also collected at the scene: seven bells, seven railroad spikes, five pennies, a metallic chain with depictions of different agricultural implements, a beaded necklace (to which were attached pennies, sticks, cut cowrie shells and a chain), a decapitated white chicken, an arrow in a holder, four statues with an African or possibly pre-Columbian type of depiction, one rubber snake, one preserved snake wrapped around a cardboard core, numerous long bird feathers, three guinea hens, and the handle for a large iron pot.

Comment • The multicolored necklace with the cut cowrie shells and attached pennies and sticks (Fig. 7, see page 634a) may have belonged to a high priest. The skull with its red and white wax and lying on a red and white cloth would symbolize Mama Nsasi which is the equivalent of Chango in the Santeria cult. The railroad spikes and sticks are typical of Palo Mayombe and the number seven, in this case, may well represent the Seven African Powers. The five pennies may also represent Zarabanda which is the equivalent of Oggun in Santeria. Other symbolisms suggestive of Zarabanda include the railroad spikes and the chain with agricultural implements. The snakes are used to call the dead. Nearby, underneath a large banyan tree was also found a black ragdoll. It was though that this scene represented the ceremonial dismantling of an nganga. Upon the death of a Palero it is believed that the nganga must be ceremoniously destroyed (if it is not passed on to a successor) so that the evil mischief will not run free and uncontrolled.[14] Also found at the scene was a small jar filled with dirt and inside this was a piece of brown paper with a name written on it. Beneath the name was a circle with an arrow going through the circle. The police were not able to trace this particular individual.

Case 5 — The medical examiner's office was requested to inspect a grave site which had been desecrated several days earlier. The investigation revealed the large cement lid to the vault of the grave had, in fact, been cracked along its upper third and portions along the sides had been chipped away. Physical evidence at the scene indicated the cement slab (approximately 6 feet long, 3 feet wide and 4 inches thick) had been lifted off and placed on an adjacent grave site. Near the gate of the cemetery was a brown paper which contained the remains of a decapitated chicken. The grave which had been desecrated was the seventh one from the gate. The investigators removed the vault lid. The coffin contained the remains of an elderly black female who had died of natural causes five years earlier. The head had been stolen. No other portions of the body were disturbed, and jewelry and other personal effects were not disturbed. Further examination of the immediate surroundings disclosed a hunting knife on the floor of the vault. The knife blade was partly rusted and the brown handle had black and red stripes at either end.

Comment • Grave robbings associated with Palo Mayombe have been previously encountered in this community.[10] Typically, there is the syncretism with Santeria. In this case the knife itself would represent Zarabanda (Oggun in Santeria) and the black and red stripes would be symbolic of Tata Legua (Eleggua in Santeria). It was thought that this particular grave was chosen simply because it was the seventh from the gate and, hence, would be symbolic of the Seven African Powers. The decapitated chicken near the gate would most likely represent the propitiation to Tata Legua (Eleggua). The symbolism leaves little doubt that the motive for the grave robbing, in this case, was related to Palo Mayombe. The particular use intended for the skull is conjectural but could possibly be for a particular ceremonial or for use in a nganga. In a previously reported incident of this nature[10] a skull which had been stolen from a grave site was found in a cemetery approximately 2½ years after the grave robbing had taken place.

Discussion • The Spanish and Yoruba cultures have modified the original Congo religion in an acculturative process which has evolved into the Palo Mayombe cult as we observe it today. Its presence in South Florida will undoubtedly result in further modification.

The nganga is a central feature of Palo Mayombe, and its ceremonial destruction originally consisted in burying the altar in a secluded area (personal communication, Dr. Lydia Cabrera). In South

Florida, however, the ngangas are found dismantled in a cemetery (Case 4) or simply abandoned in vacant lots. Alternatively, the skull (kiyumba or spirt of the nganga) is left in a cemetery[10, 11] or other appropriate place (Case 1) with a few symbolic items but not the other components of the nganga. Thus far, the skulls which have been examined have either been purchased (as in Case 2 and 3) or appear to have been smuggled into this country.[10] Although grave robbings have been previously associated with this cult,[10] they remain unusual events (Case 5) in South Florida.

Despite the orientation of Palo Mayombe to malevolent sorcery, we have not encountered any deaths related to this cult in either a literal or preternatural sense. Outright homicide related to Palo Mayombe, however, was reported at the turn of the century.[15]

While Palo Mayombe is separate and distinct from Santeria in its origin and orientation, the cult has nonetheless incorporated much of the symbolism of Santeria. This has led to the use of the term "Santeria" in a generic sense to encompass the syncretic religions of both Yoruba and Congo origins. Understandably, those who practice Santeria in the Yoruba tradition (i.e. white or neutral orientation) resent the association of skulls, grave robbings, and other activities attributable to Palo Mayombe. This is especially true since Palo Mayombe did not originate from Santeria (as, for example, the Protestant sects originated from the Catholic Church). Thus, while practitioners of Santeria do not regard Palo Mayombe as a sect of Santeria per se, outside observers will inevitably associate the two systems with each other because of the syncretism and the symbols now common to both. Whether further blending of these religious systems occurs remains to be seen. Likewise, it will be of interest to observe whether the popularity of Palo Mayombe will diminish in South Florida or become more manifest and appear in other areas of America where Caribbean immigrants have settled.

References

1. Sandoval, M.C.: Santeria as a Mental Health Care System: An Historical Overview, Soc. Sci. Med. 138:137-1S1, 1979.
2. Gonzalez-Wippler, M.: African Magic in Latin America: Santeria, Julian Press, Inc., New York, 1973, p. 30.
3. Ibid., p. 28.
4. Ibid. pp. 162-163.
5. Sandoval, M.: Santeria: Afro-Cuban Concepts of Disease and its Treatment in Miami, J. Oper. Psych. 8:52-63, 1977.
6. Op. Cit., Gonzalez-Wippler, p. 124.
7. Courlander, H.: Treasurery of Afro-American Folklore, Crown Press, New York, 1976.
8. Op. Cit., Gonzalez-Wippler, p. 130.
9. Op. Cit., Gonzalez-Wippler, p. 126.
10. Wetli, C.V. and Martinez, R.: Forensic Sciences Aspects of Santeria, a Religious Cult of African Origin, J. Forensic Sciences 26:S06-S14, 1981.
11. Martinez, R. and Wetli, C.V.: Santeria: Magico-Religious System of Afro-Cuban Origin, Amer. J. Soc. Psych. 2:32-38, 1982.
12. Op. Cit., Gonzalez-Wippler, p. 127.
13. Cabrera, Lydia: Reglas de Congo: Palo Mayombe-Palo Monte, Penninsular Printing, Miami, 1979.
14. Op. Cit., Gonzalez-Wippler, p. 133.
15. Ortiz, F.: Los Negros Brujos, Ediciones Universal, Miami, 1973.

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Voodoo paraphernalia



Fig. 1. — An nganga complete with skull, railroad spikes, and glyphs as well as symbolism of Santeria (Copyright, ASTM, 1916 Race Street, Philadelphia, PA 19103. Reprinted from J. Forensic Sci. 26:506-514, 1981, with permission). Fig. 5. — Skull found in an nganga and covered with feathers, wax, and blood (Case 3). Fig. 6. — Skull with adherent blood, feathers, and wax found in a cemetery with items from a dismantled nganga (Case 4). Fig. 7. — Necklace found among items of a dismantled nganga (Case 4).



5



6



7



Herbs used in Voodoo



Throw downs, fixin, rooting and hexing

William M. Straight, M.D.

> Tom Dilliard's Santeria body count this week was eight pigs, two goats and too many chickens to tally. Every bit of 100, he estimated... It was just another week for Dillard who has been running the Miami River clean up boat for 18 years. ... The animals are apparently ritual sacrifices beheaded to honor dieties of Santeria or Voodum.[1]
>
> A 16-year-old girl previously warned that the child she was bearing was a demon, abandoned the newborn infant in a Pompano Beach dumpster. . . the teenage mother had just returned from a visit ... to a man called "The Bishop" who is a so-called "root man," a purveyor of blessings and cures... The Bishop told Davis her baby was a demon. . . The boy had a sixth finger — with no bone in it — on his left hand.[2]
>
> Five days at sea, en route from the poverty of Haiti, to the promised land, called simply Miami, two of the women among the 88 persons aboard the wooden sailboat went into trances. The gods demanded appeasing. So on October 6, 1981, a voodoo priest aboard... ordered a sacrifice. Two men were thrown overboard, according to other passengers.[3]

Alternative religio-medical beliefs are not new to Florida, of course. However, the heavy influx of both legal and illegal immigrants from the Caribbean basin countries has sharply increased the numbers of devotees in our midst. Among these alternative religio-medical belief systems are: Voodoo, Obeah, Santeria and Esperitismo (Spiritualism). Although believers in one of these systems may consult one or more healers from another of these systems and our conventional health care system ad seriatim or simultaneously, generally they tend to adhere to their native system. Thus the Cubans consult a Santero (male) or Santera (female). The Bahamians and some Southern blacks consult the Obeah man. The Puerto Ricans consult the Esperitista. The Haitians consult the Houngan (male) or Mambo (female). The Southern blacks consult the Voodoo (Hoodoo) priest or priestess or the spiritual reader. This paper will confine itself chiefly to Voodoo (Hoodoo) as practiced among the blacks of the southern United States and certain medical folklore beliefs that are inseparable from Voodoo beliefs. Voodoo as practiced in Haiti and among many of the estimated 30,000 Haitians now living in Florida will get only limited mention.

Voodoo arrived in North America from West Africa (particularly Senecac, Dahomey and the Cameroons) by way of Hispaniola, now Haiti and the Dominican Republic. Slave rebellions in Hispaniola during the 18th and early 19th centuries forced the white plantation owners to flee often taking with them loyal slaves. Thus more than 10,000 slaves arrived in Louisiana bringing with them their Voodoo beliefs. The term Voodoo (Vodun, Voudou) is thought to be derived from an Ewe word for spirit or demon which was in use in Dahomeny, West Africa, at the time of slaving. The term Hoodoo seems to be a corruption of Voodoo or possibly of the West African term juju which means to conjure. The term Hoodoo is thought to have arisen in the South outside of New Orleans.[4]

Voodoo in Florida • An early mention of Voodoo in Florida appears in an address before the Florida Medical Association at the annual session of 1891. Dr. James C. Neal, appealing to the physicians of the FMA to seek repeal of the law that allowed ill-trained midwives states:

> At the most helpless time in woman's life, when in throes of agony unspeakable, when needing all the skill of thorough education and sound judgment, mingled with loving care and tender sympathy, then she is often at the mercy of some

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coarse old dame, or ignorant black "granny" who, guileless of knowledge of anatomy, surgery or therapy, dares to interfere, prescribes powerful remedies recklessly, or resorts to superstitious or magical rites, or Voodoo charms derived from African savagery.[5]

Neal cites 40 cases in thumbnail sketches to illustrate the need for a more adequate law governing midwifery.

One such case (No. 33) was a black multipara who began convulsing early in labor. The three black grannies attending her concluded the devil had possessed the poor woman and that "his satanic majesty demanded a sacrifice." They caught a small black hen and with one holding the right leg and wing and another holding the left leg and wing, the third sawed through the body of the hapless hen with a dull knife. The pieces of the carcass were then thrown into a blazing fire in the fireplace. In other cases Neal cites the freshly delivered mother being forced to drink small quantities of placental blood or eat a piece of the umbilical cord to prevent after pains.

Floridian, Zora Neale Hurston, a black folklorist and social anthropologist, has left us detailed descriptions of Voodoo practice in Florida in the 1920's and 1930's.[6,7] Hurston notes that the Voodoo worship transplanted from Haiti rapidly took on the characteristics of the religious practices in each locale. Thus in New Orleans, largely Catholic, in addition to the use of herbs, reptiles and insects it made use of altars, candles, incense, holy water and blessed oil. In Florida however, the trappings of the church were not used but in addition to the herbs, reptiles and insects, fragments of the human body were incorporated. Also in her day the element of spiritualism, the power of the dead to help or harm the living, was a strong tenent of the Voodooists.[6] She points out there were "root doctors" who were not Hoodoo doctors but that nearly all Hoodoo doctors also practiced "roots." She mentions a root doctor (not a Hoodoo doctor) at Bartow who enjoyed a huge partronage among the whites as well as the blacks. Hurston further cites remedies used by Hoodoo doctors at Palatka, Sanford, Miami and Coconut Grove.[6]

Miss Marie Cappick, a newspaper woman and historian of Key West has recorded a vivid picture of Voodoo and Obeah as practiced in the southermost city prior to 1933.[8]

> Voodooism was practiced in Key West until about twenty-five years ago, when residents complained to civil authorities about the disturbances created in the section of the island where the Congo Negroes held their dances and other tribal customs. The Nanigroes, a branch of the Voodooists, of whom it was said offered sacrifice, held processions at stated periods of the year, and these were slumber disturbances to the natives. The processions were frightening to adults as also to children. Men with masks of animals over their faces, wearing burlap bags for costumes, and carrying lighted torches, shuffled along the streets at midnight to the weird music provided by goatskin covered drums, rattling of seed-filled gourds and the thud-thud of iron-wood clubs. The voodoo followers had their place of worship on Thomas street close by South Beach, and within the shadow of old Fort Taylor.

In the second of the series of three articles she describes an all night ceremony she was permitted to attend and in the third recounts several fixins, one of which follows:

> Not long ago there was a colored woman who spent much of her time on one of the upper Keys with her husband who was farming there. On one of her visits to her home in Key West, the woman complained to her husband of a peculiar odor in the house, especially around her bed. She believed there was something in the mattress that should not be there and asked her husband to open the mattress for her. He said he was too tired and sleepy to do it that night, but would open it the next day. The next morning he forgot about opening the mattress and left for his farm on the Keys to look after his chickens. While he was away his wife fell ill and a doctor was called in. Nothing the medical practitioner did helped the sick woman and she became alarmingly ill. Her husband was called from the Key where he was, and several physicians were asked to consultation. There were no beneficial results from their consultation. The woman's right arm and leg became swollen until they were ready to break the skin, and in time became corrupted, as did other parts of her body. In time the arm and leg fell off, and when death released her from her sufferings there was nothing her people could do but wrap her in bed sheets and bury her at once. Her husband and other relatives were firm in their belief that she had been "fixed." Some said they saw a Congo man enter the house while the man and his wife were on the Key, that he entered the house by means of a window and it is supposed that he placed an evil charm in the woman's mattress.

The recent influx of several thousand Haitians into South Florida has brought Haitian trained Voodoo priests and priestesses as is documented both in the newspapers[9] and sociological accounts.[10] Dr. Clarissa Scott notes that the two Houngans known to her also represent themselves as spiritual doctors and use the title, "Reverend." They call upon the power of the Holy Spirit to assist in healing.

The current scene in South Florida • If you've got problems with illness, love, marriage, money, failing nature (impotence), a court case or if you've been rooted, I can tell you where to find help. Each Thursday *The Miami Times*, Miami's black newspaper, displays a page or two of advertisements from healers ready to help you, often for a fee paid in advance. For example "The Herb Man," pictured with a turban on his head, eyes closed and no doubt in a trance, advertises:

> Are your enemies working Voodoo spells on you? Cross-conditions, losing your husband or wife, problem on your job, bad luck, spell on you? Back pains, diabetes, nervous condition, overweight, hypertension, depressed? This man can take care of all your problems. He is from the Land of Voodoo. Men sexual problems and gas pains work guaranteed.

Then there's the Rev. Hilton, a religious woman, who is making miracles happen everywhere:

> Is an evil voodoo curse holding you down, bringing you bad luck? Making you sick and suffering, and doctors can't find anything wrong with you? Don't let the evil demon curse bother you any longer... Call Rev. Hilton and with the power of God Almighty the curse will be destroyed.

Not all advertisers are residents of Dade County. For example, there is the Prophet Lyn of Clewiston who promises to solve problems of love, witchcraft, court cases and nature in three days. Then there's Dr. Buzzard, J.M., of St. Petersburg who can provide a "hit number", get a loved one out of jail or help you win a lawsuit. Some of the advertisers are from out of town but will be in Miami on certain dates. One regular advertiser, Rev. Dallas Moore, of Donaldsonville, Georgia, has nieces living in Ft. Lauderdale and Miami who once or twice a month sponsor a bus trip to Donaldsonville leaving after work on Friday and returning Sunday evening. The author has been told Moore has a large complex in Donaldsonville providing administrative, worshipping and living areas, all of it off limits for white folks.

If you're the "do it yourself" type you can contact Sister Carris of Huntington, New York, and obtain genuine Voodoo dolls from Haiti. But then you don't have to go that far, the author bought a Voodoo doll from the Mi-World Supplys in Hialeah Gardens. This shop sells books on the occult, Voodoo, Santeria and the like and can supply incense, candles and other paraphernalia for do it yourself hexes and rootwork. There are other such shops in Dade County; look 'em up in the Yellow Pages.

While many of those who advertise appear to be charlatans preying upon the gullible, there are practitioners of Voodoo and Spiritualism who sincerely feel called to help suffering fellow beings and do so for a "donation" or even gratis. One such local healer of Bahamian parentage, born with a veil (caul) over her face, combines Christian prayers, Voodoo rituals, living sacrifices (chickens and pigeons) and the techniques of Spiritualism to help folks. A wealth of good common sense and careful observation over the years enables her to recognize organic illnesses which she often refers to medical doctors and severe psychiatric illnesses which she takes to the Crisis Intervention Center at Miami's Jackson Memorial Hospital. With those whose problems are social or mildly psychiatric she has had success. She believes there are practitioners of evil Voodoo in the Miami area and, although she practices only good Voodoo, she is prepared to remove hexes if need be.

Dr. Clarissa Scott, Research Assistant Professor in the Department of Psychiatry, University of Miami School of Medicine, tells of a middle age Bahamian woman who was admitted to the Family Medicine Service after months of illness. Five weeks of investigation and therapy produced no improvement. At this point she confided to the house officer that she had been rooted and would die if the hex was not removed. A medical staff conference was held and the decision made to go along with her belief. Interested house staff donated the necessary money and a prominent root doctor was employed. He made it clear that he wanted nothing to do with the doctors or hospital but would treat the patient in a local graveyard at midnight on a selected night. Too weak to sit up, the patient was transported on a stretcher to the selected site. A ritual (not witnessed by Dr. Scott or the house staff) lasting two hours was carried out and she was returned to the hospital. Without a change in her medical care she began to gain strength and in several weeks was able to leave the hospital ambulatory. Some months later she became sick again. This time she did not return to the hospital and medical doctors and had no money for the root doctor. She withered and died at home. A postmortem examination performed by the Medical Examiner's office resulted in a certification of her death as due to heart disease and a "belief that she had been hexed."[11]

According to Dr. William Cox, Director of the Collier County Health Department, there are one or two Voodoo priests practicing in the Immokalee area. At present there are three or four thousand Haitians in and around Immokalee. Attempts to carry out health surveys among these peoples not infrequently result in the answer "killed by Voodoo" when queried about the cause of death of relatives. Some of the Haitians have refused to give blood specimens or even stool specimens for fear that these might be used to perform an evil hex upon them.[12]

Voodoo, Hoodoo and conjuring is not limited to South Florida. A recent survey of folk practices in a rural North Florida county showed such practices alive and well there also.[13]

Basic tenants of folk medical beliefs • According to Snow[14] there are three major themes among those who adhere to folk beliefs:

1. the world is a hostile and dangerous place,
2. the individual is liable to attack from external sources,
3. the individual is helpless and must depend upon outside aid.

The individual must be wary of the world of nature, of a punitive God and of the malice of his fellow man.

Diseases are categorized as natural or unnatural illnesses. Thus a respiratory infection is thought a natural illness and the sequel of being exposed to cold weather without adequate protection. Another cause of natural illness is punishment by God. Unnatural illnesses may be those deemed the result of God withdrawing his protection thus allowing the Devil to attack the sick one, but are more often thought due to witchcraft. It is accepted that some persons possess the power to cast spells for good or ill. The victim of evil witchcraft is said to be the victim of "a throw down, fixin, rooting or hexing."

That a belief in being hexed can result in death seems well established.[15] The physiologic mechanisms of such a death have been variously attributed to: intense vasoconstriction, reduced blood volume and cardiac death;[15] extreme vagotonia with cardiac asystole[16] and spontaneous ventricular fibrillation.[17]

Two types of magic are envisioned: contagious and imitative. Contagious magic is premised on the concept that things once in physical contact can never be completely separated. Thus to do ill the Voodoo (Hoodoo) priest or priestess need only obtain fingernail parings, a lock of hair, worn clothing or even a used menstrual pad of the intended victim to work evil on the victim. Imitative magic assumes that like follows like. Thus an axe with the cutting edge up is placed under the labor bed to cut the pains of afterbirth. An evil charm cast while the moon is waxing will become more intense as the moon increases in size.

Another technique of witchcraft is intrusive magic. The purveyor of evil brings about the intrusion of something into the victim's body, commonly lizards, snakes, toads or insects. The evil one is thought to kill and dry the chosen insect or reptile, pulverize it and then surreptitiously dust it into the food of the victim. Once swallowed the insect or reptile reconstitutes itself within the victim's abdomen and causes pains and other symptoms the medical doctors can't diagnose, let alone cure. If the Voodoo doctor is not sought the victim will surely die. For fear of this happening many believers will not eat or drink outside their own home.

"Crazy" behavior and seizures are thought a sure sign of the person having been fixed or rooted. Dr. Hazel H. Weidman, Associate Professor of Social Anthropology with the Department of Psychiatry at the University of Miami School of Medicine, estimates that one third of the black patients treated at the Jackson Memorial Hospital psychiatric center believe they are victims of a hex.[18] From the files of *The Miami Herald* the author obtained a news article of 1938 about goings on in the Miami area now known as Overtown.

> Weird strains of voodoo chanting echoed through negro town Wednesday when a 15 year old girl, called a victim of two sorcerer uncles ... went to Jackson Memorial Hospital suffering with hysteria and epilepsy. The police reported that fifty neighbors were beating on the child's bed to "chase away the devil."[19]

Disease susceptibility and preventive measures • Age and sex are thought to play a significant role in susceptibility to disease. Thus the newborn infant is considered the weakest of all humans. An example of this susceptibility is the doctrine of maternal impression, a belief whose origin is shrouded in the mists of antiquity. This belief is still widespread among the rural and some strata of the urban population. Thus it is thought the child will have seizures if the pregnant mother witnesses an epileptic seizure. Even the curious dietary cravings of the pregnant woman are thought to lead to birthmarks resembling the craved item.[14]

The infant or young child must not be handled by a menstruating woman for this may result in an umbilical hernia. The child must be protected from the "evil eye," another concept whose origin is lost in antiquity. In Miami, particularly among the Latins, it is common to see a black, round or faceted, stone (fossilized coral or jet) suspended from a thin gold chain which encircles the neck. If you inquire of its significance you will learn it is called an azabache and was put around the person's neck at birth to protect against the evil eye (mal de ojo). Of course there are also the bag of asafoetida worn by country folk to ward off disease and the horse chestnut worn for good luck.

Females are thought to be the weaker sex and strength is equated with male virility. Elderly are thought to be weak because of their declining sexual vigor.

Blood beliefs • The humoral theory of the origin of disease which reached its zenith with the teachings of Galen in the second century A.D. is still with us in modified form among those devoted to Voodoo and other folk medical beliefs. Particularly among the Haitian immigrants numerous disorders are attributed to abnormalities of the blood.[20] Blood may be too large or too little in volume, too strong or too weak, clotted or thin, or too quiet or too turbulent and disease will result. It may also be unclean, too sweet or too bitter and disease result. A condition manifested by chest tightness is known as "la congestion" and thought due to the blood rising and accumulating in the chest area. Lightheadedness and presyncope are known as "faiblesse" and attributed to insufficient blood. One is thought more susceptible to blood disease at certain times of life: puberty, during menstruation, immediately postpartum and at the menopause. A malady of puberty, "suprime," is manifested by nausea and constant belly pain. The treatment is bloodletting. Suprime is considered more serious for boys for they lack an orifice that permits blood to escape naturally. To avoid blood problems stay tranquil, follow a proper diet and take purges at appropriate times.[20]

Purification of the blood with the advent of spring is another ancient ritual of folk medicine. Perhaps the reader will recall being given sulfur and molasses, castor oil or Black Draught as a child to clean out the impurities that had built up during the winter. To correct blood thickened by the cold of winter sassafras tea and poke greens are given in the spring.

Exposure to cold during menstruation is thought especially dangerous. Various problems ranging from sterility to insanity and tuberculosis are thought to occur in women who bathe during menstruation. In my own generation Southern girls were often forbidden to go swimming or bathe while their menstrual flow persisted.

In contrast heat is thought to promote menstrual flow and fertility. Thus the Southern midwife often wrapped the ankles of the pregnant mother with warm towels to bring on labor. Sage, ginger or mustard tea was resorted to in an effort to bring on menstrual flow.[14]

Animals and Voodoo • One of my informants mentioned the use of chickens and pigeons in Voodoo rituals as sacrifical animals. A completely different use of animals in Voodoo is detailed by Wilbert C. Jordan.[21] He states that the Voodoo priest (Hougan) observes the ways of animals (particularly the chicken, dog and cat) and obtains his ideas of diagnosis and treatment from animal behavior. He further states that among American believers in Voodoo, evil is represented by the snake. The priest's ability to handle and control the snake (most commonly the diamondback rattlesnake) is taken as evidence of his ability to overcome evil. The chicken is thought to represent good and biting off a chicken's head and drinking the fresh blood or merely drinking the blood of a freshly killed chicken demonstrates mastery of good and control of one's destiny.

The healing hierarchy • Among the less sophisticated of our society the ability to heal is seen more as a gift from God than acquired from education. Snow[14] delineates three classes of healers as seen by these unsophisticates. The least able of these are those who learned from someone else, be it a gifted grandmother, a neighbor or a medical school. More able than these are those who claim to have received their gift from God after reaching adult life. An example of this group is the evangelist healer. The most able healers are those marked at birth to be healers. In this category are those born as the seventh son or seventh daughter, a child born after a set of twins, a child who has never seen its father and especially a child born with a caul (amniotic membrane) over its face. As one immediately sees, physicians rank on the lowest level of the healing hierarchy along with the granny ladies.

Some voodoo curses and cures • Earlier we mentioned hexing by the intrusion of something into the victim's body. Hurston[7] records a remarkable instance of this:

> I was once talking to Mrs. Rachel Silas of Sanford, Florida, so I asked her where I could find a good voodoo doctor. "Do you believe in dat ole fogeyism, chile? Ah don't see how nobody could do none of dat work, do you?" She laughed unnecessarily. "Ah been hearin' 'about dat mess ever since Ah been big enough tuh know mahself, but shucks! Ah don't believe nobody kin do me no harm lessen they git somethin' in mah mouth." "Don't fool yourself," I answered with assurance. "People can do things to you. I done seen things happen."
>
> "Sho nuff? Well, well, well! Maybe things kin be done tuh harm yuh, cause Ah done heard good folks — folks dat ought to know say dat it sho is a fact. Anyhow Ah figger it pays tuh be kerful."
>
> "Oh yeah, Mrs. Rachel, Ah've seen a woman full of scorpions." "Oh it kin be done, honey, no effs and ands 'bout de thing. There's things that kin be done. Ah seen uh' 'oman wid uh gopher in her belly. You could see 'm movin' 'round in her. And once every day he'd turn hisself clear over and then you could hear her hollerin' for more than a mile. Dat hard shell would be cuttin' her insides. Way after 'while she took down ill sick from it and died. Ah knowed de man dat don dat trick. Dat was done in uh dish of hoppin-john" (black-eyed peas and rice cooked together).
>
> Mrs. Viney White, a neighbor, was sitting there so she spoke. "Ah knowed into dat mahself. It waz done over her breaking de leg of one of his hens dat wuz scratchin' up her garden. When she took down sick Ah went to see her and Ah told her folks right then dat somebody had done throwed at her, but they didn't b'lieve in nothin'. Went and got a Medical doctor, and they can't do them kind of cases no good at all. Fact is it makes it worser." She stopped short and nodded her head apprehensively towards the window. Rachel nodded her head knowingly. "She out dere now, trying tuh eavesdrop."
>
> "Who you talkin' 'bout?" I asked.
>
> "De one dat does all de underhand work 'round here. She even throwed at me once, but she can't do nothin'. Ah totes mah Big John de Conquerer wid me. And Ah sprinkles mustard seed 'round my door every night before Ah goes tuh bed."

Voodoo practitioners are frequently called upon to render aid in man-woman relationships. Thus if a woman wants to make a man fall hopelessly in love with her she is advised to put a few drops of her urine or menstrual discharge into the coffee or food she serves him. To get rid of your husband or an unwanted male companion, sprinkle salt in the bedroom and be fussing while you put it down. Sweep it out before it melts, and he will go away and never come back.[6]

To keep your husband away from other women, take a dish rag and after having intercourse with him dry his penis with it. As long as you keep the rag, he can *never* have intercourse with another woman. He may have an erection, but as soon as he attempts the act his penis will wilt.[6] Another revered method of keeping your husband faithful is the "nine knots method." While your husband is sleeping take a piece of thread or string and measure the length of his penis. Tie nine knots in the string and wear it at your waist. As long as you do, he can never perform intercourse with another woman. A variation of this is to use a piece of yellow cloth saturated with your husband's semen and curse the interloper as you tie each of the knots.[4] The husband who wants to escape his wife's power and get his nature back is advised to boil a pound of blue grass (Sisyrinchium atlanticum), drain the grass from the pot liquor, then drink nine swallows of the pot liquor on each of the next six mornings. Another antidote to regain nature is to bathe in jimson weed (Datura stramonium) and salt-peter (potassium nitrate) three times daily for nine days.[4]

Much of Voodoo lore centers around the dead and their ability to influence the lives of the living. Graveyard dust, also called goofer dust, plays a prominent role in Voodoo curses. Thus the following ritual to kill an enemy:

> Get some of the intended victim's urine, put it in a bottle and add graveyard dust (available at many spiritual supply stores as well as in the field). Shake it well and stop the bottle tightly. Bury the bottle three feet down in the ground near the person's doorstep or other area over which the person is certain to walk. Once the intended victim has walked over the spot, he will be unable to urinate and he will die — unless another worker locates the bottle and digs it up.[4]

Dirt from a sinner's grave is especially powerful but his spirit is likely to get unruly and kill others for the sake of killing. Thus goofer dust from a sinner's grave is not to be handled by amateurs or the inept. Hurston notes that many Voodoo practitioners will only use dirt from an infant's grave as the spirit is more easily controlled.

Sometimes the dead are offended by acts of the living and slap the face of the living. When this happens, the head is slapped one-sided and the victim can never straighten his neck. This might be an explanation for torticollis.[7]

Why bother about Voodoo? • For some the intellectual stimulation of acquiring knowledge of Voodoo, Santeria, Espiritismo and other folk medical beliefs is sufficient justification for the time spent. For others who are engaged in the day to day care of firm believers in these disciplines a knowledge is essential. For example if the physician's advice contradicts deeply held beliefs, it is not likely to be followed. Thus among the Haitians, meat is thought to raise the blood pressure; therefore, if the physician recommends meat to overcome anemia in a Haitian with hypertension, the advice will be contradictory and probably ignored.

It is not likely the patient will point out to the physician that his advice is contradictory for to most of the American blacks and other ethnic minority groups the doctor represents an authoritative and perhaps threatening figure. Indeed, it is up to the doctor to think of the possibility that the patient believes himself hexed and actively solicit information on this matter. Dr. Ronald Wintrobe, a psychiatrist who has directed a study of root work, points out:

> A primary task in therapy is to recognize the patient's legitimate right to believe in a hex just as we may believe that people are the victims of circumstance and fate.[18]

For psychiatrists and other medical personnel dealing with the Haitian immigrants a knowledge of Haitian folk belief is needed to avoid psychiatric misdiagnoses. Dr. Marie A. Mathewson, a social anthropologist and former director of the Haitian Unit, Community Mental Health Service, Jackson Memorial Hospital, Miami, believes that psychiatrists ignorant of Haitian folk beliefs have overdiagnosed paranoid schizophrenia.[22] She points out that the unsophisticated Haitians conceive of a world consisting of two major components: "the visible world, including human beings, and the invisible world of the dead, spirits and other supernatural beings." As with the unsophisticated Southern blacks, the Haitian views the world as a hostile place and people as potential sources of harm. Haitians interviewed at the Crisis Intervention Center "very frequently" expressed "fears that other people or supernatural beings" were trying to influence or harm them.

Another aspect of Haitian folk belief that can be misinterpreted by Anglo medical personnel is the Haitian concept of dreams. The unsophisticated Haitian believes that one of the functions of dreams is to allow communication with human beings and with the inhabitants of the invisible world. Thus "when dead relatives or spirits appear in a dream, Haitians tend to perceive the experience as something that actually took place." In other words, "events of both waking and sleeping experience belong to the same plane of reality."[22]

The physician should also consider the possibility the patient is taking folk remedies along with the prescriptions he has prescribed. In her study of five ethnic groups in Miami, Scott found ". . . the use of multiple resources — that is the use of different therapies or healers serially or concurrently — is one overall feature that cuts across the five individual patterns.[10] She gives an interesting example:

> A Southern black woman from South Carolina, Mrs. F., drank her Geritol as usual one morning and began to have stomach pains one-half hour later. The pains continued, and two days later she suspected she had been "fixed," probably by a substance added to the Geritol. She took olive oil and a few drops of turpentine on sugar cubes. Later that week she went to see a root woman who gave her some "bush" to "work it out." Believing that the poison was "dead," but fearful that it might have rotted away her stomach, Mrs. F. went to the emergency room of a local hospital. X-rays showed that although the stomach appeared normal, "something was down there." Mrs. F. again went to the root woman who then gave her a new potion to drink, which contained garlic, white onions, and mercury in addition to other ingredients. She next sought the services of a root doctor who operates a candle shop. This healer gave her powder to sprinkle in her house and candles to burn in the corners of the house; he also laid his hands on her and prayed.
>
> After hearing from a neighbor about a sanctified woman in a farming area 20 miles south of Miami, Mrs. F. began making two or three trips a week to be treated by her. The woman rubbed Mrs. F.'s abdomen with a red substance and prayed over her. Mrs. F. subsequently reported that she felt much better. However, she continued to keep candles lighted according to her root doctor's advice, to take the garlic and mercury potion from the root woman, and to be massaged by the sanctified woman. Recently, Mrs. F. went to Jackson Memorial Hospital for gastrointestinal tests to "find out what is down there."

Murphree and Barrow found that all of the people they interviewed purposely avoided telling the medical doctor that they were also using "old timey" remedies lest they be scoffed at.[13]

There have been occasions when root doctors inadvertently caused deaths. Michaelson[18] tells of one such instance:

Most notorious of root doctors was Dr. Bug, who for $50 would guarantee anyone who did not want to be drafted into the service that he would fail the physical. Violating the usual root doctor tenet, Bug gave his clients a potion to swallow. He had a high percentage of success. In fact, so many young men with a particular type of heart condition were seen by physicians at Fort Jackson that they named the complaint the "hippity-hoppity heart syndrome."

Dr. Bug's downfall came when one of his clients, wanting to make no mistake about escaping the draft, took a double dose. He died. An autopsy showed the potion causing the heart irregularities was a mixture of oleander leaves, rubbing alcohol, moth balls and lead.

Dehexing the hexed • Is there something the practicing physician or psychiatrist can do to help people who are convinced they are hexed? Dr. Hazel Weidman is quoted as saying that successful dehexing must involve:

1. recognition of a hexed patient,
2. an understanding of how a root doctor works,
3. development of a treatment approach which embraces both psychotherapeutic and "root" techniques.[18]

Twenty-four of 26 patients who felt themselves hexed have been helped by hypnosis and one psychiatrist has treated six cases with some success using psychoanalytic techniques.[23]

Some physicians have been able to cure root victims simply by winning their confidence and exercising strong reassurance or using the power of suggestion. Still others have resorted to "chemotherapy" such as giving injections of calcium gluconate or nicotinic acid intravenously while telling the victim that upon feeling the flush their hex will be removed. One innovative physician gives methylene blue tablets:

> I give them these pills and say that one of three things will happen. I tell them that if in the next 24 hours the color of their urine remains unchanged, they are to come back and we'll try again. If it turns red, I tell them they're doomed, that no one can help. But if it turns blue, I tell them the root is off and they'll never have to worry again.[18]

Whereas these superficial approaches may work in certain instances, they are not likely to succeed in most instances. A more promising approach is the active research in cross-cultural medicine and psychiatry in progress at certain of our universities such as at the University of Miami. Not only may we learn how best to help individuals who are ill but we may also learn tolerance for the ideas of other cultures and how to live together in harmony.

The summing up • Voodoo and folk medicine are alive in Florida today, indeed, they have recently received a "shot in the arm" with the influx of Haitians and others to our shores. In the very shadows of our three excellent medical schools Voodoo practitioners and root doctors ply their trade. I'm reminded of a favorite saying of my mother, a highly intelligent, primarily self-educated lady who was raised in the mountains of West Virginia. Although she was keenly interested in the advance of science and read avidly almost to her dying breath at 96, she couldn't quite divorce herself from belief in the doctrine of maternal impression. When puzzled at the behavior or beliefs of people she frequently resorted to: "Each to his own notion said the old lady as she kissed the cow."

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References

1. Grimm, Fred: Ritual Sacrifices Turn Miami River Red, The Miami Herald, (May 30, 1981), Sec. B, p 1.
2. Conrad, Miriam: Baby Abandoned In Dumpster; Mom Called It Demon, The Miami Herald, (June 2, 1982), Sec. B., p 1.
3. Amlong, William R.: 10 On Voodoo-Sacrifice Ship Indicted For Smuggling, The Miami Herald, (July 10, 1982), Sec. B., p 2.
4. Haskins, Jim: Voodoo & Hoodoo, Their Tradition and Craft as Revealed by Actual Practitioners, New York, Stein and Day, 1978, p 66.
5. Neal, James C.: Legalized Crime in Florida, Proceedings of the Florida Medical Association, Session 1891, Appendix F., 42-50.
6. Hurston, Zora: Hoodoo in America, J. American Folk-lore 44: 317-417, October - Decemher, 1931.
7. Hurston, Zora Neale E.: Mules and Men, Philadelphia, J.B. Lippincott Co., 1935, reprinted by Harper & Row, New York, 1970.
8. Cappick, Miss Marie: The Key West Story 1818-1950, The Coral Times, (May 2, 1958, May 9, 1958 and May 16, 1958).
9. Hampton, Ellen: Gede Ritual: Song, Spirit, Blood, The Miami Herald, (Novemher 7, 1982), Sec. B., p 1.
10. Scott, Clarissa S.: Health and Healing Practices Among Five Ethnic Groups in Miami, Florida, Puhlic Health Reports 89: 524-532, Novemher - December, 1974
11. Scott, Clarissa S.: Personal Communication, May 26, 1983.
12. Cox, William W.: Letter to William M. Straight, May 16, 1983
13. Murphree, A.H. and Barrow, M.V.: Physician Dependence, Self-Treatment Practices and Folk Remedies in a Rural Area, South. M. J. 63:403-408, April 1970.
14. Snow, Loudell, F.: Folk Medical Beliefs and Their Implications for Care of Patients, Ann Int Med. 81:82-96, 1974
15. Cannon, Walter, B.: Voodoo Death, American Anthropologist 44: 169-181, April - June 1942.
16. Richter, Curt P.: On the Phenomenon of Sudden Death in Animals and Man, Psychosomatic Med. 19:191-198, May - June 1957.
17. Lown, B., Vernier, R. and Corhalan, R.: Psychologic Stress and Threshold for Repetitive Ventricular Response, Science 182: 834-836, Novemher 23, 1973
18. Michaelson, Mike: Can a "Root Doctor" actually put a Hex on, or is it all a Great Put-On?, Today's Health, March 1972, pp 39-41 and 58-60.
19. Voodoo Chants Over Girl in Hysteria Call Police, The Miami Herald, (Novemher 10, 1938).
20. Scott, Clarissa S.: Haitian Blood Beliefs and Practices in Miami, Florida, Presented at the American Anthropological Association Annual Meeting, New Orleans, Novemher, 1973.
21. Iordan, Wilhert C.: Voodoo Medicine. Chapter 18 in Textbook of Black-Related Diseases, Richard Allen Williams, ed., New York, McGraw-Hill Book Co., 1975
22. Mathewson, Marie A.: Is Crazy Anglo Crazy Haitian? Psychiatric Annals 5: 339-343, (August) 1975.
23. Snow, Loudell F.: Sorcerers, Saints and Charlatans: Black Folk Healers in Urban America, Culture, Medicine and Psychiatry 2: 69-106, (March) 1978

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F. Elisabeth Crowell: Pensacola's pioneer nurse

Elizabeth D. Vickers

The fascinating story about a pioneer nurse in Pensacola has been shrouded in silence for several decades. At various times serendipitous pieces of information have emerged from rarely disturbed repositories of historical documents. The discovered facts weave the amazing story of Frances Elisabeth Crowell, a nurse who lived and worked in this small gulf coast city at the turn of the century. Miss Crowell's innovative accomplishments during the few years that she practiced nursing in Pensacola were remarkably prophetic of the professional heights she would ultimately achieve.

The first evidence of Miss Crowell's potential is found in a letter in one of the rarely opened files in the National Archives in Washington. The communication, dated November 28, 1898, is from Dr. J. Whiting Hargis, Assistant Surgeon of the U.S. Marine Hospital Service in Pensacola.[1] Dr. Hargis was informing his superior, Dr. Walter Wyman, Supervising Surgeon General of the Marine Hospital Service, about a change in ownership of the Pensacola Infirmary. This small medical facility, owned by Drs. Warren E. Anderson and Frank G. Renshaw, had a contract with the federal government to provide medical care to the merchant seamen in the port of Pensacola. Dr. Renshaw had recently sold his half-interest in the infirmary. However, he had been assured that the new owner intended to honor Dr. Renshaw's committment to the U.S. Government. This transaction is noteworthy because the new owner was a single, 24-year-old female nurse, Frances Elisabeth Crowell.



F. Elisabeth Crowell (Courtesy of Special Archives, John C. Pace Library, University of West Florida)

The Author

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According to Escambia County (Florida) deed records, F. Elisabeth Crowell purchased Dr. Renshaw's half-interest in the Pensacola Infirmary for $3,000 in 1898.[2] Such a sizable investment would be an impressive financial venture for a single, 24-year-old woman in 1983. In 1898, it must have been a rare, aggressive and courageous act.

At the turn of the century, American nursing was in its professional infancy. Nursing involved long hours of hard work and menial tasks. Few well-organized nurses training programs existed. Although the value of competent nursing care had been demonstrated in the Crimean War and in the American Civil War, American society was not ready to support the fledgling profession in its quest for growth and maturity. Nurse historian, Mary Roberts, points out in *American Nursing* that "Thousands of Americans in 1900 had never seen a trained nurse."[3] Consequently, the public image of the nurse was a very sentimental one. "Parents might admire self-sacrifice," she explains, "but not for their own daughters."[4] Thus it was difficult to attract competent students to nursing schools — the necessary first step in shaping nursing into a profession.

However, a wave of restlessness was surfacing among the middle to upper middle class Victorian women during this era. Janet W. James writes that many were "... tired of the domestic responsibilities of the unmarried daughter or sister in the family and eager for an absorbing occupation out in the world."[5] Many of these women were well-educated and were not content to spend the rest of their lives as teachers or librarians as the only alternatives to marriage or spinsterhood. They were generally competent, intellectually curious women seeking fulfillment. It was inevitable that some would be attracted to nursing, a profession in dire need of independent, innovative women.

Some women who were willing to risk secure positions in the family hierarchy in exchange for challenge in the world must have had grave misgivings when they encountered reality. Nursing schools had been established in proportion to the number of small hospitals that had mushroomed in the 1890's. There were not enough well-trained nurses to develop effective training programs. The students worked long hours, had little or no qualified supervision and attended but few medical lectures, which were usually given at the end of the day. Roberts records the harsh fact that most nursing students were but a pair of hands to provide free service in facilities generating little income.[6]

On the other hand, some fortunate women discovered that a few nursing schools associated with prestigious hosptials were run by intelligent women of vision. At Johns Hopkins in Baltimore, Isabel Hampton, superintendent of the training school, was "determined to give the school a clear identity as an educational institution."[7] The students attended well-planned lectures, wrote papers, took written and oral examinations and were carefully supervised in their clinical experience. They worked among the leading medical educators of the day.

Nurses such as Isabel Hampton were the prime movers in elevating nursing to a profession. At the International Congress of Charities, Corrections and Philanthropy held as part of the Columbia Exposition in Chicago in 1893, Miss Hampton and others spoke of the urgent issues: the need for improved standards in nursing education, for defining the relationship of hospitals to training schools and for cooperative efforts among nursing leaders through a national organization.[8] The momentum to bring order to the chaos of nursing began at this Congress, maintained a steady pace and had far reaching effects for the next half century.

It was this chaotic but challenging world of nursing that attracted Elisabeth Crowell to St. Joseph's Hospital School of Nursing in Chicago in 1893. Miss Crowell was an intelligent woman who had completed her secondary education in three years at St. Mary's of the Springs, a Catholic boarding school in Ohio. The curriculum at St. Mary's included English, mathematics, science, philosophy, music and art. According to Sister Mary McCaffrey, archivist at St. Mary's, Miss Crowell "... studied piano, guitar, French and German and excelled in all. She also gained high marks in elementary and in studio drawing. With only one exception, her grades were at the levels of 'highest attainment and excellence.'"[9] It was a kind of stroke of fate that someone of Miss Crowell's intellectual caliber should choose nursing as her worldly pursuit.

In 1893, Miss Crowell entered the first class at St. Joseph's Hospital and graduated in 1895.[10] It is questionable whether she found the inquiring, stimulating atmosphere of a Johns Hopkins or whether she was just another pair of exploited hands. In her history of St. Joseph's School of Nursing, Sr. Zita Huber notes that the educational program included lectures by noted physicians in the Chicago area, use of newly published nursing texts and nursing experience in several medical specialities.[11] However, she acknowledges that students worked from 7 a.m. until 7 p.m. and then had to prepare dressings in the evening. After a rigorous 12-hour day, the average student nurse probably had little energy for meaningful study.

Pensacola years • According to Modeste Anderson Beard, Dr. Anderson's youngest daughter, it is unclear why Miss Crowell came to Pensacola to work after graduating from nursing school.[12] However, after two years of experience in a large city hospital, she was probably well prepared for any unexpected nursing demands she might encounter in a gulf coast marine hospital. The Pensacola Infirmary was located at the water's edge on West Zarragossa Street and catered to rough, crude seamen from all parts of the world. The

mariners' illnesses related to hard work, exposure to tropical diseases and indiscriminate social activity in the cheap boarding houses catering to the seamen. The Pensacola Infirmary was hardly the place where one would expect to find a young lady with a refined boarding school education. Yet, that was where F. Elisabeth Crowell, Superintendent, lived and worked in 1896.[13]

In 1900, the Pensacola Infirmary moved to a more respectable site just north of the business district of Pensacola and was renamed St. Anthony's Hospital.[14] The infirmary also became a chartered corporation.[15] Dr. Anderson, Miss Crowell and P. C. Brent, a prominent businessman, were the major stockholders. Total hospital assets were valued at $25,000. Miss Crowell, the hospital superintendent, was the Secretary-Treasurer.[16] *The Daily News*, a Pensacola newspaper, gave a detailed description of the three-story hospital located in a former broading house. The completely renovated facility included an operating room, accomodations for private as well as indigent and colored patients and living quarters for the nursing staff.[17]

There are no hospital records that describe the medical events at St. Anthony's from 1900 to 1905. However, newspaper stories about accidents at the port and at the railroad and accounts of shooting incidents in the city indicate that many seriously injured people were treated at this hospital.[18] Medical care for the indigent of the city and the county was also provided at St. Anthony's. City and county records contain regular references to negotiations with Miss Crowell regarding the contracts and payment for medical services to the poor.[19] When yellow fever infected the city in 1905, a large number of the patients were admitted to St. Anthony's.[20]

A published report of the 1901 stockholders' meeting cited the increase in patient admissions at the facility, the public's realization of the need for trained nurses and the increased demand for private duty nurses in private homes in Pensacola.[21] These factors influenced the establishment of a nursing school under the direction of Elisabeth Crowell at St. Anthony's.[22] Whether the school was founded to train competent nurses or to secure inexpensive labor is a matter for speculation. However, since Miss Crowell strove for excellence in her own education, she probably aspired for excellence in her own hospital staff. One way to accomplish this goal was by training nurses herself.

Elisabeth Crowell left Pensacola sometime in 1905. It cannot be confirmed that she was here during the severe yellow fever epidemic that placed great nursing demands on St. Anthony's and eventually led to the hospital's financial demise.[24] Except for a brief sojourn to study Italian at Ohio State University, Miss Crowell had spent almost the first ten years of her professional life in Pensacola. While here, she had invested in ownership of a hospital, opened a nursing school and successfully negotiated with the city and county governments for hospital care of the indigent. Few people remember seeing the tall, dark-haired, attractive nurse on the streets of Pensacola. Sadder still, her accomplishments, so remarkable for a woman at the turn of the century, have been generally unrecognized in the city of Pensacola.

Public health activities • The Pensacola years marked the first step in an illustrious career that plunged Elisabeth Crowell into the public health movement blossoming in larger American cities. In furthering her career, Miss Crowell took a course in social work at the New York School of Philanthropy (now the graduate school of social work at Columbia University) and graduated in 1906. She then became a special investigator for the Association of Neighborhood Workers in New York City.[25] Her published study, "The Midwives of New York," on the poorly trained and nonregulated midwives in that city led to state legislation to upgrade and control the practice of midwifery.[26] She subsequently did a similar study in Chicago under auspices of Hull House and the Chicago Medical Society. The latter study was published in the *Journal of the American Medical Association* in April, 1908.[27]

Miss Crowell was the Executive Secretary of the Association of Tuberculosis Clinics in New York City from about 1910 until 1917. One of her accomplishments in this position was the writing and publishing of educational materials related to tuberculosis and its control.[28]

Elisabeth Crowell's professional activities were concerned not only with the immediate health needs of the less fortunate in New York and Chicago, but also with prevention programs to assure a more healthful future for these same groups. This purposeful concern for the future seems to have carried over into her personal life. In 1917, she drew up a will that named Catherine Hargis Anderson the sole beneficiary of her estate.[29] Mrs. Anderson was the widow of Dr. W. E. Anderson, one of the original owners of St. Anthony's Hospital in Pensacola. The Andersons had become very close friends with Elisabeth Crowell who had no living relatives. In addition to planning for the disposal of her estate in the event of death, Miss Crowell had thought carefully about her means of financial support at the age of 60 or 65. Could she be financially independent or would she have to accept charity? Her research on the subject is interestingly summarized in an article, "A Life Income At Age Sixty," published in the *American Journal of Nursing* in 1917.[30] She concluded that income bonds issued by insurance companies were the best means of assuring a retirement pension. Her plans for her own retirement, which were probably updated at

regular intervals, were obviously successful. She eventually bought a villa in Italy and spent her retirement years there.

In 1917, Miss Crowell went to Europe as the nursing member of the Commission for the Prevention of Tuberculosis under the auspices of the Rockefeller Foundation. The commission was sent in response to a request of the French government to help in coping with the severe incidence of tuberculosis in France. Miss Crowell's work in organizing clinics and training health visitors was highly acclaimed.[31] When the commission was terminated in 1922, she was awarded the Legion of Honor insignia by President Millerand of France.[32]

Miss Crowell's next challenge was an assignment by the Rockefeller Foundation to do a study of the nursing needs of Europe. Her effectiveness soon became evident. E.R. Embree, Secretary of the Foundation, wrote:

> She is keen and intelligent in her analysis of situations, sympathetic in her appreciation of individuals and institutions and effective in her work. We have in her a leader in whom we may place great confidence.[33]

She was subsequently appointed a regular member of the field staff of the Foundation and began implementation of the recommendations for nurses' training in Europe. Schools of nursing and public health nurses training programs were established. Central bureaus of nursing were organized in three countries.[34] *The American Journal of Nursing* described this remarkable woman as:

> Endowed with a dynamic personality and the intellectual qualities of the true statesman, ... Miss Crowell is one of the most influential persons in European nursing today, for she is sought by health officers for advice on nursing, advice which has led to the establishment of some of Europe's most progressive schools of nursing.[35]

Her significant contributions to nursing were acknowledged by the International Council of Nursing in 1941 when she was made an honorary member of that organization for her "... advancement of nursing throughout the world."[36]

Upon her retirement in 1941, Miss Crowell went to live in Italy. Her life-long involvement in nursing almost precluded a complete withdrawal from her profession. She accepted an appointment as advisor to the American Red Cross regarding refugees.[37] This advisory role is rather ironic in view of her own subsequent refugee status in Italy during World War II. She was confined to a Roman Catholic convent during most of the war.[38]

In November, 1949, Frances Elisabeth Crowell suffered a massive stroke. She died in February, 1950, at the age of 75.[39]

Elisabeth Crowell had entered nursing school in 1893, the same year in which Isabel Hampton had issued her powerful challenges to nursing leaders at the Columbia Exposition in Chicago. Responses to the challenges would eventually mold nursing into an effective and respected profession. Elisabeth Crowell was one of those outstanding women who possessed the courage, foresight and desire needed to realize these nursing goals. Every phase of her nursing career was geared to upgrading the education of nurses and to improving the nursing care of the sick. Nursing history testifies to her accomplishments in New York, Chicago, and several European countries. Only her work in Pensacola has gone unnoticed over the years.

Perhaps the Pensacola years of Elisabeth Crowell's life were a time for introspection and development of ideas regarding her personal and professional goals. It may be that her nursing experiences at St. Anthony's Hospital and her personal relationships in this emerging coastal city were tempering influences that motivated her to continue striving for excellence and to attain it in nursing arenas far from Florida. If so, then it seems appropriate for Pensacolians to look back over Elisabeth Crowell's remarkable career and recognize the nurturing role this city played in the early years of her distinguished career. Her sojourn in Pensacola was a brief but important segment of her journey in the world of nursing.

Acknowledgments

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References

1. Letter from J. Whiting Hargis, U.S.M.H.S. Surgeon to Dr. Walter Wyman, Supervising Surgeon General, U.S.M.H.S., November 28, 1898, Public Health Service, General Subject Files — 1897-1923, File #449, Box 60.
2. Deed Book #21, Escambia County, Florida, November 23, 1898.
3. Roberts, Mary M.. American Nursing: History and Interpretation, New York, The MacMillan Company, 1954, p 54
4. Ibid
5. James, Janet Wilson: Isabel Hampton and the Professionalization of Nursing in the 1890's, in The Therapeutic Revolution, Ed. by Morris J. Vogel and Charles E. Rosenberg, Philadelphia, University of Pennsylvania Press, 1977, p 214.
6. Roberts, p 20.
7. James, p 217.
8. James, p 228-229.
9. Letter from Sister Mary McCaffrey, O.P., Archivist, St. Mary's of the Springs, Columbus, Ohio, October 14, 1981.
10. Letter from Patricia Spencer, Archivist, St. Joseph Hospital, Chicago, August 18, 1981.
11. Sister Zita Huber, D.C.: A History of St. Joseph School of Nursing, Master's Thesis, De Paul University, August 1939, pp 19-24.
12. Interview with Modeste Anderson Beard, Pensacola, Florida, February 19, 1981.
13. Pensacola Directory, 1896. Montgomery, Alabama, Brown Printing Co., 1896.
14. The Daily News, Pensacola, Florida, May 3, 1901.
15. Incorporation Record Book, #1, Escambia County, Florida, August 11, 1900.
16. Ibid.
17. The Daily News, May 3, 1901.

18. The Daily News, August 7, 1900; October 11, 1901; January 20, 1903.
19. Commissioners Court Record, Escambia County, Florida, March 13, 1900; April 10, 1900; November 12, 1901, April 8, 1902, April 12, 1903; April 12, 1904
20. Accession 82-6, Yellow Fever Cases, 1905 Special Collections, John C. Pace Library, University of West Florida, Pensacola, Florida.
21. The Daily News, November 7, 1901.
22. Brochure, St. Anthony's Hospital and Sanitarium and Training School, Pensacola, Florida.
23. Porter, J.Y.: Yellow Fever in Tampa and Pensacola, Florida, 1905, Report of the Surgeon General of the U.S.P.H.S. and M.H.S. for 1906-07, Washington, 1907.
24. The Pensacola Journal, Pensacola, Florida, January 17, 1906.
25. Interview with James Cyphers, Archivist, The Rockefeller Archive Center, North Tarrytown, N.Y., May 17, 1981.
26. Crowell, F. Elisabeth: The Midwifes of New York, in Charities and Commons, 17 (12 Jan. 1907) pp 667-677.
Stewart, Isabel M. and Austin, Anne L.: A History of Nursing, New York, G.P. Putnams' Sons, 1962, p 198.
27. Crowell, F. Elisabeth: The Midwives of Chicago, The Journal of the American Medical Association, 50 (25 April, 1908) pp 1346-1350.
28. Letter from Inge Dupont, New York Academy of Medicine, October 15, 1981.
29. Letter from F. Elisabeth Crowell to F.R. Anderson, July 21, 1917.
30. Crowell, F. Elisabeth: A Life Income at Age Sixty, American Journal of Nursing, 18 (October, 1917) p 31-33.
31. Specialists in Internationalism, American Journal of Nursing, 31 (December, 1931) pp 1411-13.
32. The New York Times, July 8, 1922.
33. Rockefeller Foundation History, Vol. 9, p 2223. The Rockefeller Archive Center, North Tarrytown, N.Y.
34. News About Nursing, American Journal of Nursing, 40 (July, 1940) pp 826-27.
35. Specialists in Internationalism, p 1412.
36. Dear Sisters of the World, American Journal of Nursing, 37 (September, 1937) p 1006.
37. News About Nursing, p 826.
38. Interview with Modeste Anderson Beard, February 19, 1981.
39. Letter from Helen Vroom to Edwin R. Embree, February 16, 1950, The Rockefeller Archive Center, North Tarrytown, N.Y.

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THE ICE MAN OF APALACHICOLA

Dr. John Gorrie

Medical history is replete with statistics regarding deaths from fever, and before the middle of the 19th century, little could be done to aid the afflicted. Yellow fever, smallpox, typhoid and scarlet fever were scourges that came in epidemics and caused rapid elevation of body temperature from which, all too often, the victim died.

Even for sunstroke patients, lowering body temperature—when attempted at all—was rough and crude treatment consisting of dunking the victim, often fully clothed, into cold water.[1]

Patented invention

It was, therefore, a significant medical development when, on May 6, 1851, U.S. patent No. 8080 was granted to Dr. John Gorrie of Apalachicola for his mechanical refrigeration technique that perfected the process for making artificial ice.[2]

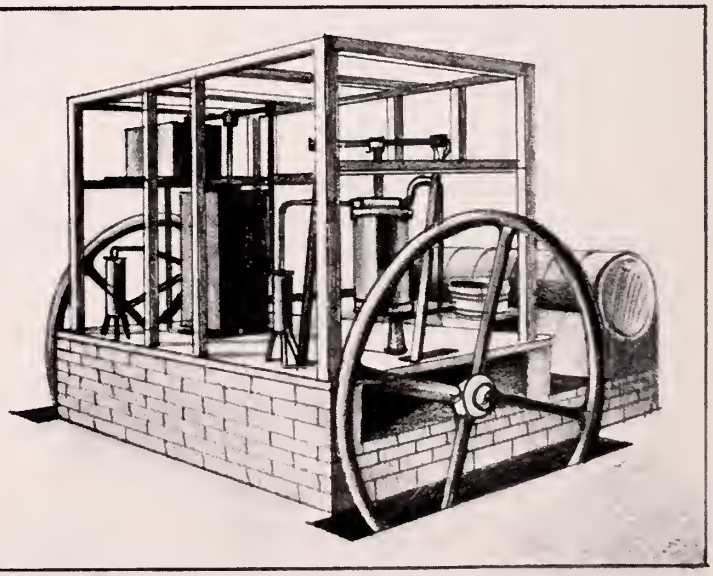
Dr. Gorrie installed his artificial ice machine in the United States Marine Hospital in Apalachicola;[2] there it came to the attention of other Florida physicians, who began to explore ways of using the ice-making process in preventing and treating yellow fever.[3]

Now a necessity

Today its medical applications are myriad—medications are kept fresh, foods are kept chilled, germs are kept under control, patients are kept comfortable and, often, treatments include applications of ice packs. All these conveniences and treatments—and more—are direct descendants from the historic invention of Dr. John Gorrie.

References: 1. Headquarters: The hospital, chap. 7, in Lee RV, Eimerl S *et al: The Physician.* New York, Life Science Library, Time Inc., 1967, p. 149. **2.** Kane JN: *Famous First Facts,* 3rd ed.; New York, The H. W. Wilson Co., 1964, p. 518. **3.** Day SM: *J. Flo. Med. Assoc. 69*:719, 1982.





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When the history reveals anxious depression...

For the estimated 70 percent of nonpsychotic depressed patients who are also anxious,[1] Limbitrol provides both amitriptyline, specific for symptoms of depression, and the effects of Librium® (chlordiazepoxide HCl), the tested and dependable anxiolytic. Limbitrol is, therefore, a better choice for these patients than dual agents that contain a phenothiazine, a class of antipsychotic drugs used infrequently in nonpsychotic patients.[1]

62% of Overall Improvement...Within the First Week

Limbitrol also has a rapid onset of action which may lead to greater patient compliance. In a multicenter study, patients taking Limbitrol experienced 62% of their overall improvement within the first week of therapy.[2]

In another multicenter study,[3] the following symptoms associated with anxious depression were significantly reduced during the first two weeks of therapy:

- ☐ Headache—79%
- ☐ Early insomnia—91%
 Middle insomnia—87%
 Late insomnia—89%
- ☐ Gastrointestinal upset—73%

In two multicenter studies, only 1.9% of Limbitrol patients experienced cardiovascular side effects.[3]

Patients should be cautioned about the combined effects with alcohol or other CNS depressants and about activities requiring complete mental alertness such as operating machinery or driving a car.

References: 1. Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine,* edited by Jorvik ME; New York, Appleton-Century-Crofts, 1977, p. 316. 2. Feighner JP *et al: Psychopharmacology 61*:217-229, Mar 1979. 3. Data on file, Hoffmonn-La Roche Inc., Nutley, NJ.

In moderate depression and anxiety

Limbitrol® 5/12.5 10/25

Tablets 5-12.5 each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)

Tablets 10-25 each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt)

Please see summary of product information on following page.

LIMBITROL® TABLETS Ⓝ Tranquilizer—Antidepressant
Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of moderate to severe depression associated with moderate to severe anxiety.
Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.
Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).
Usage in Pregnancy: **Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage; withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).
Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated: sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.
Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.
The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:
Cardiovascular: Hypotension, hypertension, tachycardia, palpitations myocardial infarction, arrhythmias, heart block, stroke.
Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.
Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.
Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.
Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.
Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.
Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.
Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.
Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly.
Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.
How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.

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. . . if you, or a physician you know, have an alcohol or other drug-related problem.

FMA Committee on Impaired Physicians

SPECIAL ARTICLE

Your "great potential"

Edward N. Brandt Jr., M.D.

Note: Presented at the Commencement of the Class of 1983, University of Florida School of Medicine, Gainesville, May 28, 1983.

Let me begin by congratulating each of you who are graduating today. You have accomplished a lot and you should be proud. Don't forget those people who have supported you with their love and their money: your parents, your spouse, your friends, and the taxpayers of Florida and the United States. You owe them a great deal. But if you serve the people well, you will repay that debt. But never forget: It Is A Debt.

All commencement addresses should inject some philosophy. I'd like to begin by quoting my favorite philospher, a tough young man who exists only in our imagination. He has an overbearing, hostile sister named Lucy who dispenses psychiatric advice. He also has a friend named Snoopy who leads a marvelous fantasy life and has remarkable insight into people.

By now you should know that my philisopher friend is Linus, a very bright young man about whom everyone says that he has a great potential. Reflecting on that, Linus says, "A great potential is an awesome burden."

Well, he was talking about you. Each of you graduating today has demonstrated your potential and now you must assume the awesome burden. Fortunately, you are doing so at an exciting time.

The Author
EDWARD N. BRANDT JR., M.D.
Dr. Brandt is Assistant Secretary for Health, U.S. Department of Health and Human Services.

For the past 30 years, the Federal Government has assumed a greater and greater role in medicine. Physicians, scientists, and the public we serve have been subjected to rules, regulations, and directions — all well intentioned — that told us what to do, when to do it, and how to do it.

That is changing, I'm happy to report. But the change will continue only if you are willing to recognize your "awesome burden" and assume the responsibility of seeing that the people are served effectively, efficiently, and without discrimination on any basis.

The change will continue only if you are willing to recognize your "awesome burden" and assume the responsibility of seeing that the people are served effectively.

Over the past 30 months many changes have taken place, and I am grateful for being able to participate in them. It has been a period of great controversy, but for too long the health policy of this nation has been determined by special interest groups whose concerns are commendable but narrow, thereby depriving the American people of the best that is in us. That — I hope and believe — has changed.

What's the main thing that has happened? In my judgment it is the fact that we have returned decision-making authority to state and local health officials and the professions. The biggest change has been in programs of health service delivery.

We have attempted to re-define the federal role in health. For example, we are making research the primary activity. Biomedical and behavioral research holds the key to the alleviation of human suffering. While all other domestic programs have been trimmed back in some way, contributing to the successful effort to lower the country's annual rate of inflation, my research budget has been increased in 1983 by more than a third of a billion dollars to a total of over $4 billion for the current fiscal year. With the lowered rate of inflation, that represents one of the largest increases in research purchasing power in recent years.

The future is indeed exciting. The recombinant D.N.A. and Monoclonal Hybridoma techniques offer much promise that we are already beginning to see fulfilled.

The future is indeed exciting. The recombinant D.N.A. and Monoclonal Hybridoma techniques offer much promise that we are already beginning to see fulfilled. Much has been done — and more is coming. Given a limited budget and a vast array of research issues, how do we decide what research to support? How do we set our priorities?

One approach is to pick the common diseases — coronary artery disease, cancer, diabetes — and put our money into them. But people with rare diseases — tourrette syndrome, Wilson's disease, and Down syndrome, for example — say, "Hey, what about us?" We heard them and just last year set up an "orphan drug products board," which I chair, to address this issue.

It's not possible and it's certainly not fair to run a research program like a popularity contest. There are two major reasons for that:

First, if we can save just one life — and we have a reasonably good idea of how to go about it — we have a moral and ethical responsibility to proceed. So while the orphan drug products may ease the pain or save the lives of a very few people with rare and uncommon diseases, we are obligated to develop those products.

I might add that the pharmaceutical industry has set up its own group to look at this problem with the idea of making sure that such products are in fact produced and made available, even though they may be unprofitable.

Second, the pursuit of knowledge is an unpredictable adventure. You probably have read of the work of Dr. Baruch Blumberg who was working among the Australian aborigines, identifying blood types and doing other rather esoteric research. But in the course of his work he came upon some biomedical information that, over the next several years, was transformed into the basis for the new, recently released hepatitis "B" vaccine. That was not the result that Dr. Blumberg had in mind when he first entered the jungles with his research equipment. But it was part of the story that he brought out of the jungle.

The public health service is responsible for over $4 billion to support biomedical and behavioral research. Priorities are on our agenda every day. How should we make those decisions? To whom should we listen, to help make those decisions? I would hope that your voices would be heard. If they are not raised on these important matters, then you will not be assuming your own "awesome burden" and, thereby, you will not be repaying your debt.

I cannot emphasize too much the seriousness of the challenge we all face and the great value of your contribution towards meeting that challenge. For one thing, you are among the first professional medical personnel graduating into a society that has come to recognize its limits. We've been faced with running out of oil, running out of money, running out of water... experiences that had never confronted Americans before. We are learning how to remain strong, with strong American values, even though the economic climate may be very different.

A major challenge for all of us is the cost of health care, for it is the major determinant of access. Throughout 1982 the American people spent about $321 billion on health and medical care. Related to personal income, the figures come out this way: for every $100 a person earned last year, he or she spent about $11 on health care. Ten years ago, that figure was only $8 per $100 dollars of earned income.

The evidence is clear enough that with the passing of each year Americans use proportionately more and more of their money — as individuals and, through the gross national product, as a society — to defray the rising costs of health care. They are taking that money away from things like education, food and clothing, transportation and housing.

The rising costs of health care have a ripple effect as well. The people who run businesses, employ workers, and provide those workers with health coverage have had to build the rising costs of health care into the pricing of their goods and services.

One of the challenges you will face as you move into the world of medical practice is the challenge of controlling the costs of care.

The prices of things generally in this country went up, for the 12 months ending in March, by 3.6 percent. But within that overall inflation rate — one of the lowest in our history — is the narrower rate for medical care alone. That, by itself, went up 10.5

percent between March 1982 and March 1983. In other words, while the country was seeing an historic reduction in the rate of inflation, medical care was still running at three times the overall rate.

One of the challenges you will face as you move into the world of medical practice is the challenge of controlling the costs of care. Every person involved in the delivery of care must assume responsibility for doing whatever can be done to make health care affordable for everyone and no longer a prime influence, in the rising cost of living, along with gasoline and used cars.

One way we believe we can control the rising costs of care is to focus more of our attention and our energies upon the prevention of disease and disability and promotion of health.

One way we believe we can control the rising costs of care is to focus more of our attention and our energies upon the prevention of disease and disability and promotion of health. These two complementary ideas have become the keystones of national public health policy. They are cost-effective and life-effective.

We are convinced that the treatment of alcoholism, for example, is far more costly to both the individual and to society than the prevention of alcoholism. Similarly, the detection and treatment of lung cancer or of cardiovascular disease is many times the cost of getting people to stop smoking.

And I would include in those costs not only the dollars paid out for certain medical and health services, but also the losses in productivity suffered by that individual's employer.

Many of our contemporary public health problems — alcoholism, obesity, drug abuse, stress, highway trauma, and so on — are overwhelming for those health systems organized only to practice curative and reparative medicine. What seems to be needed is the development and implementation of a "prevention ethic."

In other words, every American must be willing to do those things that are necesary for good health. And health professionals need to accept the challenge to assist patients to understand the importance of prevention and to take actions that promote their own good health. I am proud of the fact that we can treat myocardial infarctions effectively in a 45-year-old man. And we should do whatever we can to help him avoid a second one.

But our ultimate challenge is to prevent his first one. To help us meet that challenge, we need a great deal of new knowledge drawn from both the biomedical and behavioral sciences but developed from the perspective of preventive medicine:

- We are gathering much new information about the impact of certain enviornmental hazards, re-evaluating some that are familiar to us and taking a look at some that are just beginning to appear or are threatening to appear.
- Much modern medical care depends upon mechanisms of the immune system, yet we have only scratched the surface of this fascinating and highly significant area of prevention.
- We have a new hepatitis "B" vaccine on the market, but there are other equally exciting vaccine possibilities in the research stream.

The results of this and other research will go to shape the scientific environment in which you all may be practicing. But it will not all be new. While we may do more to balance curative and reparative medicine, we will also be reinforcing some of the major prevention methodologies already in use.

For example, our program of mass child immunizations will continue so that we will still be able to protect 95 percent or better of all our school-aged children against the ravaging diseases of childhood. This effort so far has had extraordinary success — the kind of success we will not compromise but rather strengthen in the years ahead.

Here is the record for calendar year 1982 for several of the diseases that once preyed on millions of children in this country:

- We had a total of only 7 cases of paralytic polio for the whole country for the whole year.
- If you exclude one outbreak of German measles in California last year, you come up with only 867 reported cases of Rubella in the United States in 1982.
- We had only 81 cases of tetanus.
- We had only 3 reported cases of diphtheria.
- And we recorded the lowest totals in our history for measles and mumps.

What all this means is that most of the physicians graduating today will go through life and probably never see a child with one of the classic infectious diseases of childhood . . . the same disease that your parents either had or barely escaped having in their own childhood.

But before we get too carried away with our successes, we ought to remember that we are confronted today by a virtual epidemic of the sexually transmitted diseases. For some of our citizens, they are the new infectious diseases of childhood: Genital herpes . . . Gonorrhea . . . Syphilis . . . Chlamydia . . . Pelvic inflammatory disease . . . A roll-call of pain and despair. These diseases are transmitted primarily through the chosen behavior of sexually active adolescents and young adults. Among these diseases no vaccine, no wonder drug, no antibiotic is as effective as individual choice, which is the heart of the "prevention ethic."

We have another kind of "epidemic" in our society as well. It is not the traditional disease-based epidemic, but it is a widespread phenomenon nevertheless. There are millions of Americans — something like 35 million, in fact — who are disabled, handicapped, or limited in some way from leading a full life as an able-bodied person. Roughly 1 in 7 persons are in this group. In a little more than a decade, the total number of disabled Americans has increased by more than one-third.

As I've sketched out my case so far, science and medicine have been loyal and patient servants of society.

Some of these disabling conditions may be prevented by further advances in medicine. But others can only be prevented by changes in behavior. We need to know a great deal, therefore, about both kinds of health care — biomedical and behavioral — if we want to slow down the growth in numbers of persons disabled or limited in some way. And the gaining of that knowledge has to be a priority research activity.

As I've sketched out my case so far, science and medicine have been loyal and patient servants of society. Through political power and the power of the purse, society permits science and medicine to exist... gives it the money to exist . . . and lays out its priorities as well. But the true picture is more complicated than that.

Science can also be a strong and sometimes independent influence upon society. These two forces — science and society — move with and against each other with reciprocating energy. Yes, society does set the agenda for science. But science has its turn as well, forcing society to move in a new direction.

By way of illustration, let me recall society's experiences with just three drugs of recent vintage. They are the tranquilizers, the contraceptives, and the immuno-suppressants. You know all about the first two, I'm sure. The third one is new and could be a significant influence on the way you practice . . . and on your patient's approach to life.

The development of the tranquilizer brought about a fundamental change in our management of mental illness. It questioned what had once been a generally accepted theory of institutionalization for the mentally ill. The availability of the tranquilizer forced us to deal with every mentally ill person as unique — not just another member of an unfortunate social sub-let. It made us see the potential for returning such individuals to full social membership.

The second example is the oral contraceptive. By the time "the pill" was released for marketing in this country in 1966, the so-called "sexual revolution" was already under way. But it accelerated exponentially with the introduction of "the pill". And since then we have been plunged into what seems like a never-ending quest for the meaning of sex, love, child-bearing, the family and other basic elements of human relationship.

But the most profound effect of "the pill" may still be developing, for this common prescription drug alters a life process — something that never happened before in human history. "The pill" demonstrated to us that we could begin thinking about growth...aging... and death . . . as life processes that could also be manipulated.

Finally, there are the immuno-suppressants . . . especially the new cyclosporin-A. These drugs make it possible to transplant organs from one human body to another. Indeed, it is now possible to transplant corneas, kidneys, hearts, lungs, the pancreas, livers, bone, bone marrow, and even hair. Hence, it is possible for a dying or a dead person to give life to a fellow human being.

Science has done that for us. But we are not truly ready to do it for ourselves. Science, in this matter, is racing ahead of society. For example, for some people the donation of an organ is a violation of personal religious belief, in the way that an autopsy would be. It is also a tenet in common law that the body of the deceased is part of his or her estate . . . it is property passed on to one's heirs and can be claimed as such.

Still, people are dying for lack of a healthy major organ and the media carry appeals for donations of hearts, livers, and kidneys.

Still, people are dying for lack of a healthy major organ and the media carry appeals for donations of hearts, livers, and kidneys. A number of states have adopted a "uniform anatomical gift act" to help meet the anguished cries of the dying and their families.

But the demand for organs is becoming so intense, that some people now advocate a change . . . they advocate a law that says everyone is presumed to have donated their organs upon death — unless they have specifically indicated they don't want to. That is a fundamentally different law from the "uniform anatomical gift act"... and I would underscore the word "gift."

Oddly enough, the research we've done so far at the Centers for Disease Control indicates that only 2 percent of the kidneys among prematurely dead persons are transplantable. But we have many more individuals who need one. We don't have figures on hearts, livers, and lungs, but what if the percentages prove to be the same? With the number of people who need a life-saving major organ far out-distancing the number who can donate one, how should we decide who will get one and who will not?

These are what Guido Calabresi has called the "tragic choices" of contemporary medical science. Human beings . . . ourselves . . . will be making more of these choices, now that we have cyclosporin-A available, a drug that makes feasible the transplanting of a major organ. Cyclosporin-A is still in the investigational stage, but it could be released for marketing fairly soon. And thus your class of 1983 may be the first to have generally available to it this revolutionary product of biomedical science.

These drugs are illustrations — from among many that are available in contemporary medicine — that we need to give a great deal more respect to the relationships between medicine and society and, in the process, rethink many of our basic, traditional, comfortable beliefs about our bodies . . . our lives . . . our science . . . and our responsibilities to those around us.

Well, I have presented you with a lot of questions in the hope that you will seize the opportunity to shape some of the answers. It is your responsibility as physicians and as professionals. If you don't exercise that responsibility, someone else will . . . and you will be reduced to having to carry out their solutions.

That has already happened in our society. For much too long a time, professionals have been left out of the decision-making process . . . people with knowledge and valuable experience have been ignored and pushed aside. And society has been the loser for it.

But I think things are changing now. The climate is right. But with that change comes responsibility . . .

The responsibility to think about problems . . .

The responsibility to weigh the competing forces engaged in either creating or solving those problems . . .

And the responsibility to speak out.

I leave you with this "awesome burden." But I know you are up to it. Now, you must accept it . . . or people like me will step in to fill the gap.

Let me close with a quotation from one of the great philosophers of liberty, John Stuart Mill. Over a hundred years ago, he wrote:

> Towards what ultimate point is society tending by its progress? When the progress ceases, in what condition are we to expect to leave mankind?

I leave you with this "awesome burden." But I know you are up to it. Now, you must accept it... or people like me will step in to fill the gap.

That is the ultimate question. We cannot let progress cease as long as there is human suffering that we may be able to prevent or control. This is the "awesome burden" we all share.

Now is the time for you to get involved. The American people deserve your finest efforts.

I give you my best wishes for a satisfying and committed career.

Thank you.

● Dr. Brandt, U.S. Department of Health and Human Services, Washington, D.C. 20201.

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NOTES & NEWS

Dr. Nealis elected to office in American Medical EEG Association

James G.T. Nealis, M.D., a Jacksonville neurologist has been named President-Elect of the American Medical EEG Association. This is an organization of neurologists, psychiatrists, and neurosurgeons from all fifty states and twenty-one foreign countries. Its main goal is the advancement of the neurosciences and electrophysiology. Dr. Nealis also serves as President of the Florida Society of Neurology. He has published over twenty scientific articles and has contributed to several books in the area of neuroscience.



Dr. Nealis

World Health Organization designates University of Miami unit as Center for Mental Health, Alcohol, and Drug Dependence

It started out in 1972 as a store front operation where Hispanics living in Dade County could go for mental health treatment which was sensitive to Latin values and idiosyncrasies.

This week, the University of Miami was notified that the Spanish Family Guidance Center, a unit of the School of Medicine's department of psychiatry, has been designated as a World Health Organization Collaborating Center for Mental Health, Alcohol, and Drug Dependence, effective for the next four years.

The functions of the Center will include:

- Developing research programs in mental health, alcohol and drug abuse in collaboration with Southern Hemisphere Center.
- Developing mental health care models for specific populations — adolescents, the elderly, and refugees.
- Conducting research in areas of mental health in relation to migration, acculturation and adjustment.
- Training professionals in specific areas of research, both of a clinical and community nature.
- Developing educational packages for mental health administrators, educators and clinicians which will span a wide spectrum of programs, services and treatments in alcohol, drug abuse and mental health.
- Organizing and contucting interamerican conferences.

Also, the Center will coordinate a national network of satellite training sites in Washington, D.C., New York, California, Texas and Puerto Rico.

Jose Szapocznik, Ph.D., director of the Spanish Family Guidance Center, will become both the director and senior scientist of the WHO Center. It will be guided by an executive committee composed of James N. Sussex, M.D., chairman of the department of psychiatry; Raquel Cohen, M.D.; David Santisteban, Ph.D.; and Cristina de Falla, director of international affairs at UM. Dr. Szapocznik is chairman of the committee. Dr. Cohen will also become the Center's director of education.

University of Florida College of Medicine granted 10 year accreditation

A full 10-year national accreditation, the highest accreditation status that can be attained by a medical college in the United States, has been granted the University of Florida's College of Medicine.

When last accredited in 1975, the college was awarded a seven-year accreditation, the highest that could be received at that time.

The 1983 accreditation report by the Liaison Committee on Medical Education (LCME) cites the high quality of the college's performance in teaching, research, financial management, continuing education and public service. The committee includes representatives from the American Medical Association, the Association of American Medical Colleges, and the public.

Dr. William B. Deal, dean of the college, was complimented in the report for his "strong administration and the outstanding faculty and staff he has recruited." Other strengths noted in the LCME report include the college's student admissions process, the activities of the Office of Student Affairs, academic

performance of UF medical students, and the college's strong community and statewide relationships with organized medicine.

Commendations also were directed at the Program in Medical Sciences (PIMS), a cooperative educational venture of UF's medical college and Florida State University. Established 12 years ago, the PIMS program has proven to be an effective mechanism for attracting larger numbers of students from non-traditional backgrounds into medicine, and at increasing the number of physicians practicing in medically underserved regions of Florida.

The liaison committee's decision to award the maximum accreditation to UF's medical college was made after a team of four experts in medical education and one public representative spent four days evaluating the college's performance in all relevant areas of education, research and community service. Recommendations of this team later went before the entire committee which voted on the accreditation.

In preparation for the inspection and review, a 23-member UF task force of medical faculty, students and alumni completed an 18-month self-study. The internal evaluation culminated in a documentary description of the college's operations which the co-director of the LCME described as "the best prepared report I have seen in my several decades of accrediting all over North America."

Now in its 27th year of operation, UF's College of Medicine is young among the 127 U.S. medical schools and 16 Canadian medical schools which also are accredited by the LCME. Today, the college has 19 clinical and basic science departments, with 383 full-time faculty, 78 part-time faculty, and 558 volunteer faculty. The college graduates 115 to 120 Medical Doctors annually, including those who transfer to UF during their second year of medical school from PIMS. During the year 1981-82, the college's Office of Continuing Medical Education registered 685 physicians and 190 other health professionals in continuing education programs, and many others attended courses managed separately by departments and divisions of the college.

DEAN'S MESSAGE

Another look at the Hippocratic Oath

At commencement time a recurring dilemma for a medical dean is the senior oath. For five years the Hippocratic Oath was used in our College of Medicine; this was replaced in 1976 by a text that was constructed by my predecessor. In 1980 I decided to readopt the Hippocratic Oath as our senior oath.

In addition to its archaic language, the nature of the dilemma revolves around some statements within the Hipprocratic Oath that are no longer in agreement with what many — if not most — highly motivated, ethically sensitive, contemporary physicians would hold. Also some of the important principles of the Oath are already being significantly compromised. For instance, confidentiality can be violated under certain conditions of law, public safety and national security. Abortion has been legalized and dangerous drugs are used everywhere. Furthermore, a conscious but controlled invasion of the patient's rights in human experimentation is now permitted. Therefore, it may be justified to take another, but necessarily brief look at the Hippocratic Oath.

It may be an appropriate point of departure to provide some historical background. From our contemporary vantage point it is customary to distinguish three unequal periods in the medicine of antiquity. The first, or long period, began with the very birth of man and terminated when history began to be recorded. The second, or protohistoric period, began when history was first recorded and persisted until the rise of the philosophical school of Ionia. The third, or rational period, begins with the Thales of Miletus and the Greek school of philosophers. This is what is historically regarded as the Golden Age of Greece.

It is unlikely that there has ever appeared in the world's history so many men of genius within such narrow limits of time and space as in the small country of Greece in the fifth century B.C. Into the Periclean or Golden Age of Greece were squeezed not only Pericles, the great leader who gives it his name, but Sophocles, Euripides, Aristophanes, Socrates, Plato, Herodotus, Thucydides, and Hippocrates. Actually we know little about the life of the last named man, who was to earn for himself the honorable name of Father of Medicine. What cannot be doubted is that Hippocrates lived and worked for a long time on the Island of Cos in fifth century B.C. Although we know very little about the Father of Medicine and possess no statue of him, we have inherited something of much greater importance — the Hippocratic collection of books consisting of about a hundred volumes, written by different authors and at various dates. Occasionally the authors of these books express different and sometimes contradictory views; nevertheless, the writings in this collection are all inspired by the new, progressive and ethical spirit which Hippocrates breathed into medicine.

Of these, the normative principles constituting what may be generally viewed as the Hippocratic ethic are contained in the Oath and the deontological books: *Law, Decorum, Precepts* and *The Physician.* Similar ethical principles can be found scattered throughout the Hippocratic corpus, but it is these few brief ethical treatises which have formed the character of the physician for two millennia. Through-

out these centuries the moral and ethical sensitivities were provided by the Oath and the aforementioned ethical writings of the Hippocratic corpus.

The Hippocratic ethic is one of the most significant ethical codes in the history of the human race, marked by a unique combination of humanistic concern and practical wisdom admirably suited to the physician's task in society. The central and all-pervasive feature of the Oath is the respect it inculcates for the patient as expressed in the Hippocratic principle of "*primum non nocere*". Everything else in the Oath appears to emanate from this central tenet: the physician's relation with his patient is sacrocanct, and he has a great respect for teaching and, by implication, for research and the acquisition of new knowledge. In my view however, Hippocrates was also setting forth in the Oath — in the most unmistakable terms — his own personal credo on the universal brotherhood of man; his own personal statement of identifying himself with the whole family of man and of sharing their humanity in an immortal testament of faith.

I believe these are the permanent qualities of the Oath and the explanation for its enduring value.

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WORTH REPEATING

The germ of laziness: A Florida historical perspective

In our present world of medicine with its emphasis on technology and endless choices of diagnostic and treatment modalities, it is sometimes refreshing to remember simpler times and the role of the individual in the formation of medical policy.

Florida is one of the states in which present day physicians can look back with pride on the accomplishments of the state as a pioneer in early medicine. Prior to 1900, Florida and other southern states were truly in the Dark Ages as far as medicine was concerned. However, by 1925, there had been tremendous change and medicine was being ushered into the modern era. The impetus for the transition was a creature less than one inch in length — the hookworm — or more scientifically, *Necator americanus*, the American murderer. This parasite, which was not described in the United States until 1902, had obviously been in the South for decades and was responsible for much of the sickness that had stunted the growth of children, sapped the energy of countless thousands and led to the view that there was a "germ of laziness" loose on the southern populace. This was a source of jokes and ridicule to many people outside the South, and newspapers and magazines had a field day lampooning the southerners. But to the natives of this region it was no joke, for whatever caused the wasted humans, brought death in great numbers. It weakened the victim until he was defenseless against the killer diseases: tuberculosis, yellow fever, polio and pneumonia.

There were efforts to scientifically examine the southern population and discover a legitimate cause and not just dismiss the "lazy disease" as a regional peculiarity. Many causes were considered such as inadequate diet, improper clothing and climate. All of these caused some deficiencies, but few suspected that the main culprit was an intestinal parasite. This one half inch worm was literally sucking the South to death.

After the identification of the parasite in 1902, Florida took the initiative in both the treatment of hookworm disease and public health measures. It became a leader and a role model for the rest of the southern states. It was largely through those efforts that public health departments were established throughout the South. Prior to 1900, the money spent for health purposes by the state and local governments was miserably low and public health departments were practically nonexistent. By 1925 every southern state had a public health department and was spending large sums of money on research, eradication and prevention of diseases. Vaccination, immunization and periodic visits to the doctors became customary.

It has generally been accepted that the Rockefeller Commission, an outside agency, was the spearhead of these efforts, as it poured millions of dollars into the South in a massive campaign designed to educate the citizenry, promote public health measures and treat the hookworm disease. However, by the time the Rockefeller Commission came into the South, Florida already had its program in place. The state was a model which the Rockefeller Commission used. It had such a successful program that it was the only southern state not financed and included in the Rockefeller campaign. In 1909, the annual budget for the state public health services was $75,000 as compared with $21,000 for Georgia, $8,000 for Mississippi, $24,000 for South Carolina and $40,000 for Virginia.[1] Florida was the only southern state that created a special tax to finance public health services. The rules and regulations of the State Board of Health had the force of law which gave it a lever for enforcing decisions concerning sanitation measures. Florida had the only State

Board of Health in the south which exercised full control over the local health organizations. Three well equipped laboratories operated within the state. The first one was established in Jacksonville in 1902, the other two in Pensacola and Tampa in 1910.[2] The State Board of Health staff consisted for 43 full-time members. Louisiana, which possessed the next largest staff, had 15 workers.

The location of the state was a factor. Florida is semitropical, susceptible to diseases such as the hookworm and, therefore, keenly aware of the danger of these epidemic diseases. Since malaria and yellow fever swept through the state periodically, the residents were willing to listen to health authorities and take steps to combat other suspected diseases. In the early 1900's, the hookworm eradication that was being conducted in Puerto Rico alerted the doctors of Florida to this disease. The proximity and similarity of Florida to Puerto Rico made it even more urgent, and when it was announced that *Necator americanus* was in the United States, the people of Florida listened.[3]

Method of attack • The method of attacking the hookworm problem consisted of education and treatment. The State Board of Health planned the hookworm eradication program as a cooperative effort between the state and local health authorities. It was a sound practice. State medical personnel backed up the Board's efforts fully, but there was no way of predicting how the population would react. Rumors were circulating that the Rockefeller people had started the hookworm scare to get the southern population to wear shoes and were going to get rich selling those shoes.[4] The education phase consisted of inspectors who visited towns, conducted surveys to determine the extent of infection, enlisted the services of physicians, inspected privies and disseminated literature to set up educational programs. The laboratory staff supervised microscopic examinations of fecal specimens sent in from the field. The examinations were done without charge and within a short time the state laboratories were testing large numbers of specimens.



This map which accompanies the Vanderbilt University-Florida State Board of Health-Rockefeller Foundation survey of 56 Florida counties, shows the intensity and distribution of hookworm disease among Florida's rural white population. (*Map courtesy* The American Journal of Hygiene.)

Bureau of Health Education, Florida State Board of Health, Jacksonville

Photos provided by Florida Photographic Collection, Florida State Archives, Tallahassee.

The cure was quite simple. The standard of treatment at that time was thymol and Epsom salts. It had been used since 1880 to treat European hookworm, and by 1909 was the accepted treatment.[5] Thymol was only slightly soluable in water and would stun the worms, causing them to drop off the intestinal wall. Epsom salts completed the treatment by cleansing the intestines. The disadvantage in using thymol was that it was soluble in alcohol and fats and the patient had to fast for a period of 24 hours before the treatment. Obviously, deaths did occur when orders to abstain from alcohol and fats were ignored. Other drugs were used, such as carbon tetrachloride, in the 1920's. It worked very well for the worms but was a little hard on the liver.

Realizing that many residents of the state could not afford the services of a doctor, the State Board of Health inaugurated a system of subsidized payment to physicians for those who could not otherwise afford hookworm treatment. The Board paid the attending physician $3 for each indigent case treated. The only condition of payment was that the diagnosis had to be confirmed by one of the state's laboratories and a complete record of the case filed with the Board.[6] It also made available to the public a kit with which specimens could be submitted to the state laboratories for examination.

In 1909, when the Rockefeller Commission announced its gift of $1 million for the eradication of hookworm disease in the South, the physicians and the health officials in Florida were elated. However, they felt that it was not enough and each state would have to accept, as Florida was doing, more individual responsibility for eradication of the disease. For the next ten years, the Commission would send observers to the state to observe the operation which would serve as a model for other states. Interestingly, the southern part of the state also developed a very strong program. This included the Seminole Indians, and by 1913 the Board of Health regularly sent physicians to the Seminoles to treat hookworm and other diseases.[7]

The big question facing the hookworm eradication program was whether the citizens of Florida would accept it. At first, many were reluctant to embrace the program, but as efforts got underway and citizens of the state began to see for themselves that it was not

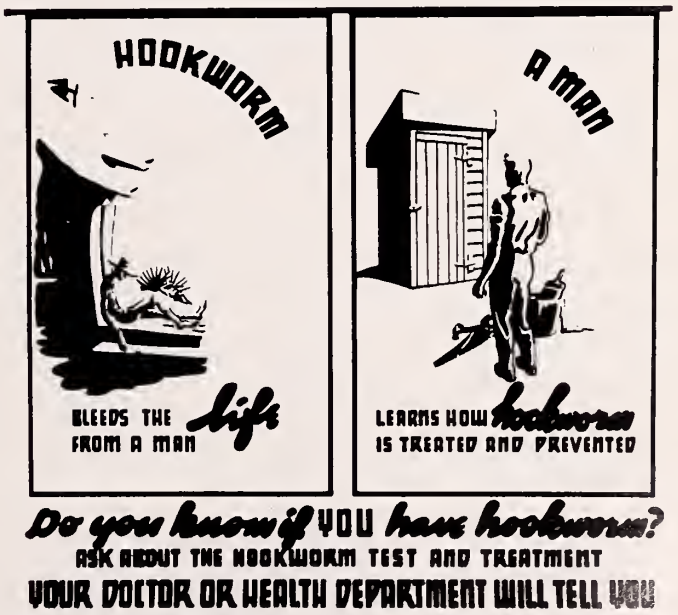
one of self-aggrandizement by anyone, but rather was designed to rid them of a health problem that had retarded and in general kept the south down, they accepted the program with enthusiasm. What developed in the state in regard to eradication of the hookworm was almost an evangelic spirit, as the free dispensaries traveled from county to county and city to city treating thousands. To many of the more traditional Floridians, it was unbelievable to see their neighbors walking as many as 15 to 20 miles to a hookworm dispensary station. It was not unusual in the towns to see hundreds of people turn out to hear a doctor speak on the hookworm, see him show slides and charts, and demonstrate the use of the microscope. After the talk was over, the people would line up and wait hours in order to get a chance to look through the microscope to see the hookworm larvae and the mature worm.

By 1912, the hookworm program was fully accepted throughout the South, largely through the example set by Floridians. The citizens did not look on passively as doctors cured the disease but took an active part in eradication efforts. They gave it moral support as well as what money they could afford. Usually, a visiting dispensary would set up for two or three days and in that time would treat from 100 to 2,000 people. A dispensary team was usually composed of a doctor and a medical technician, who handled the microscope, took specimens, completed the forms and dispensed medicines. A third member of the team was also a medical technician but he directed his efforts to educational work. He brought the slides and charts and extra microscope and would sometimes give talks designed to arouse the people and cause them to take an active part in the eradication program. These talks encouraged them to be conscious of sanitation and the advantages of their children wearing shoes and not playing in polluted areas. It was this member of the team who was largely responsible for the long-range efforts of the dispensary's visits.

A circus-like atmosphere prevailed when the dispensary came to town. Posters were placed throughout the area inviting people to come out, bring their lunch and family and spend the day talking to the staff of the dispensary.[8] Since the state was overwhelmingly rural, some communities were located 30 to 40 miles from the nearest railroad. Some did not have roads leading to them and the only way to get there was by horseback across country. However, this was not a deterrent to dispensary staffs. They rented horses, packed their equipment and rode to the communities. When they arrived, they picked out a central point. Often this was a school, a church, the town hall or any building large enough to house the equipment, staff and patients. The team came one day, set up their equipment and were ready to start testing the next morning. Usually by sunrise the line of patients had already formed. They would file by and first be handed a sheet of instructions on how to take the medications. They would then pass a table where each would receive specimen containers. They would also fill out forms about their homes, age, sex, and race. They were then dismissed to look around the premises, ask questions and in general to enjoy the "open house".

In this way, a dispensary usually completed the treatment of all those who applied within two or three days. However, no matter how enthusiastic people were, no matter how well the public officials supported the dispensaries, people could not be forced to come to them and no campaign for health or otherwise was able to generate 100% interest. However, it is significant that the dispensaries usually treated between 70% to 80% of the inhabitants of the areas in which they visited. Upon completing one area, the team would move on to another. It tried to return in three to four months with the records, more medicine and more educational material. It examined the people who had been treated earlier to determine if the worms had been eliminated. If they had been sufficiently reduced, no more thymol was required. If not, another dose was given.[9] The dispensary staff usually did not have to pay for rented space. It was not uncommon for a family to offer staff members the use of their home. Horses were loaned, clothes were given and if the dispensary became stranded because of weather or road conditions there was always help to be found in the nearest town or farm house.

One might ask, was there any element of southern society that consistently opposed the efforts of the State Board of Health and dispensary team? No evidence of this has been found. It appears that all elements of society, from businessmen to farmers, supported the program.[10] Which groups were most enthusiastic about the program? The physicians almost unanimously supported the efforts of the Board of Health.



Posters were used to encourage people to be tested and treated for hookworm.



A typical child during the hookworm eradication period.

Naturally, there were some who were less than enthusiastic. They agreed with the treatment of the disease and the purpose of the dispensaries but they did not agree with the publicity. If any doctor dared to speak out against the program, he soon found himself inundated with responses, not only from physicians outside the state but from those of his own county or town.[11] The doctors of the state did not let the golden opportunity of hookworm eradication slip through their fingers because of a reluctant few. They often took time from their own work to write the Board of Health and report the results of their efforts at hookworm eradication. What a difference it was in 1915, when any questionnaire mailed to doctors usually came back filled out, compared to 1905-1906 when sometimes only 5% came back with the requested information. By 1915, doctors were ready to supply all information on the hookworm that they could. They recognized it as a killer and they recognized the State Board of Health as the agency that was dedicated to wipe out that killer.

Heritage of awareness • When the hookworm eradication program began to slacken in 1921, it left a heritage of public health awareness. Indeed the period from 1910 to 1925 saw the development of an effective public health program and the promotion of medical education not only in Florida but throughout the South. State, county and municipal health organizations were no longer organizations on paper only but were functioning integral parts of the movement to improve health conditions. What started in Florida became the impetus for a wave of health reforms throughout the South and laid the basis for much of the medical work that would take place in the region for years to come. Out of this reform movement would come the Southern Medical Association which was founded in 1906 and experienced its greatest growth during the period of the hookworm program. It was the association that would later encourage much of the investigative work on malaria.[12] The most significant change of all was the development of local health agencies throughout the South. In 1900, these were almost nonexistent. By 1925, state, county and city health departments were flourishing. The budgets were enormous in 1925 compared to 1900. In 1918, the overall budget for health in the South was $1,316,111 an increase of 454% from 1910.[13]

In short, the health situation in Florida and the South in 1925 was far removed from the health situation of 1900. The region had matured in matters of health and was capable of carrying its own programs. Significantly the public health program was going to have a favorable impact on all the diseases of the South. The State of Florida and the physicians were in the vanguard of the movement and by example led the reform. The hookworm was not eradicated completely but the legacy of the work connected with the efforts still surrounds us today and serves as a reminder to all physicians that their predecessors left a solid foundation, not by technology particularly, but by preseverance and sound judgment.

References

1. Rockefeller Sanitary Commission, State System of Public Health, Washington, D.C., Office of the Commission, 1910, pp 1-66, passim.
2. Florida State Board of Health, Twenty-second Annual Report, for 1910, Jacksonville, State Board of Health, 1911, p 30.
3. Florida State Board of Health, Hookworms, Florida Health Notes IV, December, 1909, p 210.
4. Rockefeller Foundation, Toward the Well-Being of Mankind, New York, Doubleday and Company, 1964, p 20.
5. Rockefeller Foundation, Annual Report, 1915, Washington, D.C., 1916, p 213.
6. Florida State Board of Health, Twenty-first Annual Report, for 1909, p 22.
7. Florida State Board of Health, Twenty-fifth Annual Report, for 1913, p 124.
8. Rockefeller Foundation, Annual Report, 1916, p 78.
9. Ibid., p 229.
10. Rockefeller Sanitary Commission, Fourth Annual Report, 1913, Washington, D.C., Office of the Commission, 1914, pp 81-84.
11. The Journal of the American Medical Association, Southern Medical Journal and state medical journals were full of this denunciation
12. Jackson, J. M.: President's Address, Southern Medical Journal, V, December, 1912, p 735.
13. Rockefeller Foundation, Annual Report, 1917, p 170.

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Corrections

Hirsutism

Table 3 in the article "Hirsutism" of the May issue (Vol. 70, No. 5) contained errors. The table with corrections is printed below.

Table 3.—Summary of Main Clinical and Laboratory Features of Syndromes Associated with Hirsutism.

Syndrome	Polycystic Ovaries	Infertility	Virilization	Unilateral Mass	Plasma T		Plasma A		Serum Prolactin	17OHP Response to ACTH
					Nor. to sl. ↑	≥200 ng/ml	Nor. to sl. ↑	≥800 ng/ml		≥100 ×
Classic PCOD	+	±	–	–	+	–	+	–	–	N
Hyperthecosis	±	±	±	–	±	±	±	±	–	N
Pituitary Adenoma	±	+	–	–	+	–	+	–	+	N
Attenuated CAH	±	±	±	–	±	±	±	±	–	+
Ovarian Tumor	rare	+	+	+	–	+	+	–	–	N
Adrenal Tumor	rare	+	+	+	+	–	–	+	–	N

Correction to "Briefs"

An item published in Briefs No. 285 (July 22, 1983) reported a wrong telephone number.

The item, appearing on page 4, concerned marketing representatives appointed by Professional Insurance Management Co. The telephone number given for Mr. Gregory J. Morgan at the Miami PIMCO office was in error. It should have read: (305) 652-6282.

AMA-ERF fund raiser

You may contribute to the American Medical Association Education and Research Foundation by purchasing Medical Motif T-shirts:

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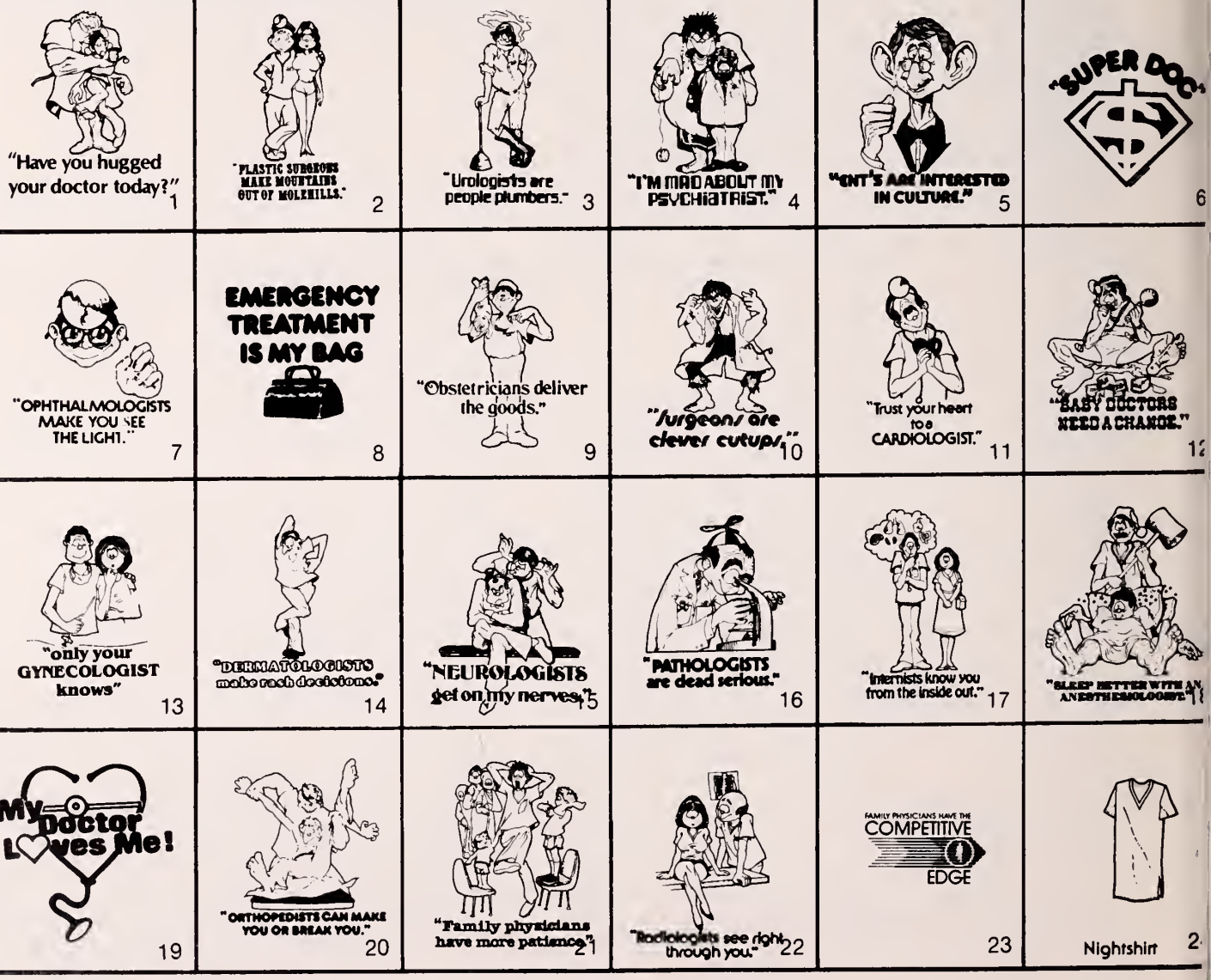
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Convention report — AMA Auxiliary

The opening of the first session of the House of Delegates at the 60th Annual Convention of the American Medical Association Auxiliary was quite an impressive event. The national officers and all the state presidents came in amid flashing lights and a stirring John Phillips Sousa march.

Before that session was called to order, the delegates had already spent a profitable day attending National Workshops on Membership, Legislation, Health Projects and AMA-ERF. The convention was held in Chicago June 19 through June 22. Florida was represented by its full quota of 19 delegates and 2 alternates.

The keynote address was presented by the Republican senator from Kansas, Nancy Landon Kassebaum. Shana Alexander, author of "Very Much A Lady" was the speaker for the brunch honoring past national presidents.

In her annual report, Mrs. Torrence P.B. Payne, national auxiliary president, stated that she had presented the AMA, at its opening House of Delegates session, a check for AMA-ERF in the amount of $1,684,386.86 from the auxiliary!

Mrs. Bruce S. (Priscilla) Gerber, Florida's state president, hosted a breakfast Monday morning after which the delegation divided into groups to attend the Reference Committee hearings on Health Issues, Organizational Affairs, and By-laws. In the afternoon, Mrs. Gerber gave the Florida state report.

During evenings, Auxilians attended various receptions and also served as Hostesses for FMA functions promoting Florida candidates for AMA positions. Receptions for Mrs. R.B. (Connie) Moore and AMPAC were particularly notable not only for fun and education but for the giant chocolate covered strawberries.

The House was lively Tuesday morning as the delegates listened to debates and voted on issues. Anyone who wonders what the national auxiliary does needs only to attend one convention to be satisfied.

Wednesday's highlight was an address by AMA President, Dr. William Y. Rial. Dr. Rial spoke on the subject of the family and the family of medicine. He talked of changing attitudes and of challenges to the patient-physician relationship. He emphasized that the AMA will protect the profession and that quality care for patients will not be compromised; the integrity of the physician will not be bought. Dr. Rial is an outstanding leader and it was a privilege to hear him.

Connie Moore gave an impressive presentation on the history of AMPAC to the House of Delegates, and made a plea for physicians and their spouses to play a more active role in the political process.

Other Floridians were much in evidence as they went forward to accept awards. The super job done by Mrs. Walter (Jody) Jarrell as AMA-ERF chairman resulted in Florida being recognized as the fourth state in the nation to raise over $100,000. In the category of membership, Florida was recognized for having the most RP/MSS (Resident Physician and Medical Student Spouse) members in the nation, thanks to Mrs. Milton (Jo) Tignor, Mrs. Daniel B. (Gloria) Nunn, '82-'83 state president, and Mrs. Joseph P. (Bea) George. Mrs. Victor (Emily) Dabby of Dade County accepted the award for the most improved county newsletter.

Florida was honored to have Mrs. B. David (Edie) Epstein elected Director of the Southern Region and Mrs. Frank C. (Ruth) Coleman elected to the national nominating committee.

After the installation of the 1983-84 officers, Mrs. Glenda Bates, the new National President challenged members to the changes of the future. Florida is up to the challenge! I deeply appreciated the opportunity to serve as a delegate for the state of Florida, the greatest state in the nation.

Mrs. Laurin G. (Nancy) Smith
President-Elect
FMA Auxiliary

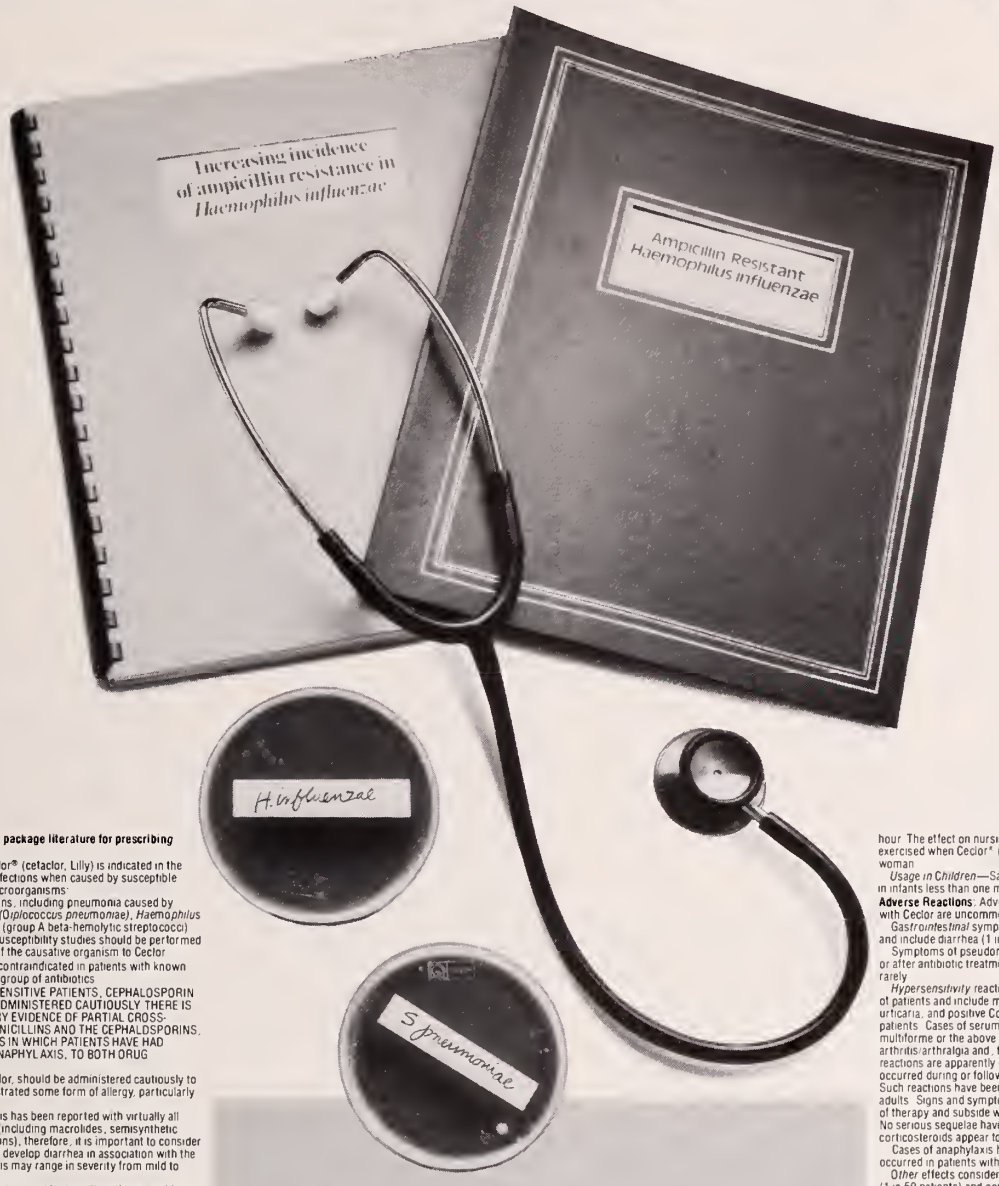
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An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor
Pulvules®, 250 and 500 mg

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae* (*Diplococcus pneumoniae*), *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions*—If an allergic reaction to Ceclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers—Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor® (cefaclor, Lilly) is administered to a nursing woman.

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2-5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1-5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations of SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[061782R]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

References

1. Antimicrob. Agents Chemother., *8*: 91, 1975.
2. Antimicrob. Agents Chemother., *11*: 470, 1977.
3. Antimicrob. Agents Chemother., *13*: 584, 1978.
4. Antimicrob. Agents Chemother., *12*: 490, 1977.
5. Current Chemotherapy (edited by W. Siegenthaler and R. Luthy), II 880. Washington, D.C.: American Society for Microbiology, 1978.
6. Antimicrob. Agents Chemother., *13*: 861, 1978.
7. Data on file, Eli Lilly and Company.
8. Principles and Practice of Infectious Diseases (edited by G.L. Mandell, R.G. Douglas, Jr., and J.E. Bennett), p. 487. New York: John Wiley & Sons, 1979.

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

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Meetings

Accepted by the FMA Committee on Continuing Medical Education for Mandatory Credit

SEPTEMBER

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", September 1, Tallahassee Hilton, Tallahassee. For information: Candace Draper, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

Neonatal-Perinatal Medicine for the Practicing Physician, September 2-3, Holiday Inn, Pensacola Beach. For information: Reed Bell, M.D., 5151 N. Ninth Avenue, Pensacola 32504, (904) 476-7851 Ext. 4065.

Workshop on Keratoprsthesis, September 3, Alachua General Hospital, Gainesville. For information: Frank M. Polack, M.D., 720 SW 2nd Avenue, Suite 306, Gainesville 32601, (904) 371-2800.

Management of Peptic Ulcer Disease, September 7, Lake City Medical Center, Lake City. For info.: J. Turner Carson, M.D., 1700 West Duval St., Lake City 32055.

USF - Sun Bay Community Hospital Surgical Dept. CME Program, September 8, Sun Bay Community Hospital, St. Petersburg. For information: Roy Behnke, M.D., 3030 Sixth Street South, St. Petersburg 33705, (813) 974-2271 or 823-1122.

Advanced Trauma Life Support (ATLS), September 8-10, University of Florida, Gainesville. For information: Rita Goldberg, American College of Surgeons, (813) 936-2414.

Current Concepts in the Diagnosis and Treatment of Adult Heart Disease II, Sept. 9-10, West Florida Regional Medical Center, Pensacola. For information: D. Bruce McGraw, M.D., P.O. Box 151, Pensacola 32591, (904) 478-4121.

12th Annual Interim Meeting, Fla. Association of General Surgeons, September 9-11, Innisbrook, Tarpon Springs. For information: John B. Richardson, P.O. Box 1428, Leesburg 32748, (904) 787-3395.

Family Practice Update 1983, September 10, Lee Memorial Hospital, Ft. Myers. For information: Jack C. O'Brian, M.D., 3594 Broadway, Ft. Myers, FL, (813) 936-7100.

Advanced Cardiac Life Support Provider Certification, September 10,11,25, Medical Center Hospital, Punta Gorda. For information: F. Wilcoxon, Medical Center Hospital, P.O. Box 1309, Punta Gorda 33951, (813) 639-3131.

Indications for Pacing Modes of Pacing, Sept. 12, Holy Cross Hospital, Ft. Lauderdale. For information: Jon R. Richtelman, M.D., Post Office Box 23460, Ft. Lauderdale 32307, (305) 492-5728.

Renal Artery Stenosis, Sept. 12, St. Mary's Hosptial, West Palm Beach. For information: Gerald J. O'Connor, M.D., 901 45th Street, West Palm Beach 33407, (305) 659-1633.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", September 15, Holiday Inn, Ft. Myers. For information: Candace Draper, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

C.O.P.D. Update and Asthma, September 15, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Ave., Spring Hill 33526, (904) 683-9440.

Tips, Tricks, Traps and Techniques in Family Practice, September 15-18, Ponce DeLeon Lodge, St. Augustine. For informatio: Thomas Michelsen, M.D., 3599 University Blvd., Suite 400, Jacksonville 32216, (904) 399-1231.

Third Annual Infectious Disease Symposium, September 16 - 17, Quality Inn, Cypress Gardens. For information: Krish B. Shroff, M.D., P.O. Box 2976, Winter Haven 33883, (813) 299-1277.

Indication for Pacing Modes of Pacing, September 19, Holy Cross Hospital, Ft. Lauderdale. For information: Jon Fichtelman, M.D., 4725 North Federal Highway, Ft. Lauderdale 33308, (305) 492-5728.

Pathophysiology of Pain, Sept. 20, St. Pete Yacht Club, St. Petersburg. For information: Paul F. Wallace, M.D., 1501 5th Avenue North, St. Petersburg 33705, (813) 896-8686.

Current Problems in Surgical Pathology with Clinical Correlates, September 20, Good Samaritan Hospital, West Palm Beach. For information: Harvey Cove, M.D., P.O. Box 3166, Good Samaritan Hospital, West Palm Beach 33402, (305) 655-5511.

Physician Sun-posium 1983, September 22-23, Marco Island, Marco Island. For information: Sam Nixon, M.D., Post Office Box 20367, Houston, TX 77030, (713) 792-4671.

Echocardiography — Clinical Update, September 24, North Ridge General Hospital, Fort Lauderdale. For information: Joseph Wanka, M.D., 5757 N. Dixie Highway, Ft. Lauderdale 33334, (305) 776-6000 Ext. 4400.

Workshop on Intervention with Chemical Dependency, Sept. 24-25, Orlando Mariott Inn, Orlando. For information: Delores Morgan, M.D., 7400 SW 62nd Avenue, Miami 33143, (305) 667-8717.

New Horizons, September 26-29, Florida State Center for Professional Development, Tallahassee. For information: Donald Beeckler, M.D., P.O. Box 12219, Tallahassee 32317, (904) 681-5265.

CMS Fall Seminar, Sept. 29, Tallahassee Memorial Regional Medical Center, Tallahassee. For information: Barnett Harrison, M.D., Tallahassee RMC, Magnolia Drive and Miccosukee Road, Tallahassee 32308, (904) 681-5121.

Diagnosis and Treatment of Impotence — A Medical and Psychiatric Overview, Sept. 29, Lake Hospital of the Palm Beaches, Lake Worth. For information: Jesse J. Kaye, M.D., 1710 4th Avenue North, Lake Worth 33460, (305) 588-7341.

7th Annual Medical Aspects of Aging, September 30-October 1, Gainesville Hilton, Gainesville. For information: James Jernigan, M.D., Box J-233, JHM Health Center, Gainesville 32610, (904) 392-4527.

Humana Physician Symposium, Sept. 30 - Oct. 1, Sonesta Beach Hotel, Key Biscayne. For information: Sam Nixon, M.D., Post Office Box 20367, Houston TX 77225, (713) 792-4671.

Soft Tissue Surgery Course, Sept. 30 - Oct. 1, Indian River Memorial Hospital, Vero Beach. For information: Ferdinand F. Becker, M.D., 777 37th Street, C-101-A, Vero Beach 32960.

OCTOBER

International Radiology Symposium, October 6-7, Hadassah Hospital, Jerusalem. For information: Ernest R. Wollin, M.D., P.O. Drawer R, Leesburg 32748, (904) 787-5858.

Basic, Intermediate and Advanced Hypnosis Workshop, October 6-9, Bahia Mar Hotel, Ft. Lauderdale. For information: Jeffry Winkelman, D.D.S., 4179 North State Road Seven, Fort Lauderdale 33313, (305) 484-4140.

The Professional & Chemical Dependency, Oct. 7, Holiday Inn, Pensacola Beach. For information: B.B. Jordan, M.D., Rt. 2, Box 174, Gulf Breeze 32561.

AAFP Annual Scientific Assembly, October 10-13, Miami Beach Convention Ctr., Miami. For information: Edward-Daleske, (816) 333-9700 (Missouri).

Better Patient Care Through Marketing, Oct. 12, Miami Bch. Convention Center, Miami Bch. For information: Andy Morley, M.D., Suite 333, 755 Columbia Drive, Decatur, GA 30030, (404) 373-0405.

Anxiety: Symptom or Diagnosis? Rationale for Recognition and Management, Oct. 13, Fountainebleau Hotel, Miami Beach. For information: Robert E. Rakel, M.D., UICM, Iowa City, Iowa, (319) 356-2813.

Diagnostic and Treatment Dilemmas in Office Psychiatry, October 14, Marriott Hotel, Orlando. For information: Orris O. Rollie, M.D., (305) 896-6611, Ext. 1815.

Profiles in Arthritis, October 15, Marriott Hotel, Orlando. For information: Orris Rollie, M.D., (305) 896-6611 Ext. 1815.

Comprehensive Management of Multiple Sclerosis, October 15, Royce Hotel, W. Palm Bch. For information: Leni Scheimer, (305) 763-6203.

18th Family Practice Review, October 17-21, Dutch Resort Hotel, Lake Buena Vista. For information: L. Crevasse, M.D., (904) 392-3143.

9th Annual Pan American Seminar, October 17-22, Mount Sinai Medical Center, Miami Bch. For information: Frederico R. Justiniani, M.D., MSMC. 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", October 20, Loch Haven Arts Center, Orlando. For info.: Candace Draper, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

Cutaneous Signs of Connective Tissue Disorders: Lupus Erythematosis, Dermatomyositis and Scleroderma, Oct. 20, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Ave., Spring Hill 33526, (904) 683-9400.

One Day Review of Electrocardiography, Oct. 26, Sheraton Sand Key Hotel, Clearwater. For information: Mrs. Jonni Cooper, R.N., Rogers Heart Foundation, 601 12th Street North, St. Petersburg 33705, (813) 596-2047.

Advanced Neuroradiology Seminar, October 26-29, Near Disney World, Orlando. For information: Charleen Krissman, 12901 North 30th Street, Tampa 33612, (813) 974-2538.

Advanced Trauma Life Support (ATLS), October 27-28, University of Florida, Gainesville. For information: Rita Goldberg, American College of Surgeons, (813) 936-2414.

24th Workshop in Electrocardiography, October 27-31, Sheraton Sand Key Hotel, Clearwater Beach. For information: Henry Marriott, M.D., Saint Anthony's Hospital, St. Petersburg, (813) 894-0790.

Third Annual Medical Conference, Oct. 28-29, La Romana, La Romana, Dominican Republic, For information: A. Gonzalvo, M.D., P.O. Box 27184, Tampa 33688, (813) 879-3400.

68th Scientific Assembly, Oct. 31-November 3, Diplomat Resort, Hollywood. For information: Ray W. Gifford Jr., M.D., (608) 257-6781.

NOVEMBER

Cardia Arrhythmias, 1983, November 2-4, Mount Siani Medical Center. For information: P. Samet, M.D., 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", Nov. 3, Cedars of Lebanon Medical Ctr., Orlando. For info.: Candace Draper, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

Spinal Deformities, November 6-9, Sheraton Bal Harbour, Bal Harbour. For information: Barry Silverman, M.D., 4300 Alton Rd., Miami Beach 33140, (305) 674-2121.

Internal Medicine Update '83, November 7-11, The Colony, Sarasota. For information: Murray Grossman, M.D., Upstate Medical Center, Syracuse, NY (315) 473-4467.

Non-Cardiac Surgery in the Cardiac Patient, November 11, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Ave., Spring Hill 33526, (904) 683-9400.

Seventh Florida Suncoast Perintal Conference, Nov. 10-12, Holiday Inn Surfside, Clearwater. For information: Margo Armstrong, (813) 823-1234, Ext. 3858.

Practical Problems in Cardiovascular Medicine for Family Physicians, Nov. 13, Fountainbleau Hotel, Miami Beach. For information: Herschel Douglas, M.D., East Tennessee State University, Box 23320A, Johnson City, TN 37614, (615) 928-6427.

Diagnosis and Treatment of Pulmonary Embolism/Deep Vein Thrombosis, November 14, St. Mary's Hosptial, West Palm Beach. For information: Gerald J. O'Connor, M.D., St. Mary's Hospital, 901 45th Street, West Palm Beach 33407, (305) 659-1633.

International Symposium on Gynecologic Oncology, Surgery, and Urology, November 14-16, James Knight International Convention Center, Miami. For information: William Little, M.D., University of Miami, (305) 547-6944.

Ninth Annual Course in Behavioral Neurology & Neuropsychology, November 16-19, Sarasota Hyatt, Sarasota. For information: Edward Valenstein, M.D., 2030 N.W. 71st Street, Gainesville 32605.

Medical Malpactice Prevention Seminar — "Anatomy of a Malpractice Case", November 17, Holiday Inn, Tampa. For information: Candace Draper, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

7th Annual Childhood Cancer Treatment Seminar, Nov. 17-19, Caribbean Gulf Resort Hotel, Clearwater Beach. For information: Cindi Butson, P.O. Box 13372, University Station, Gainesville 32604, (904) 375-6848.

Advanced Trauma Life Support, (ATLS), November 17-18, University of Florida, Gainesville. For information: Rita Goldberg, American College of Surgeons, (813) 936-2414.

33rd Annual Postgraduate Seminar — Deiabetes Mellitus, November 30 - December 2, Mt. Sinai Medical Center, Miami Bch. For information: Lee Goldberg, M.D., 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

DECEMBER

Emergencies in Internal Medicine VI, December 1-5, Frenchman's Reef Hotel, St. Thomas, Virgin Islands. For information: Laurence Gardner, M.D., University of Miami, (305) 325-6337.

Clinical Allergy & Immunology for the Practicing Physician, December 8 - 10, Buena Vista Palace, Lake Buena Vista. For information: Richard F. Lockey, M.D., (813) 972-2000, Ext. 597.

The First Thirty Minutes: The Boston City Hospital Approach to Medical and Pediatric Emergencies, December 27, Buena Vista Palace Hotel, Lake Buena Vista. For information: R. Levin, M.D., Boston City Hosital, 818 Harrison Avenue, Boston, MA 02118, (617) 424-5421.

JANUARY 1984

16th Annual Postgraduate Seminar in Pediatric & Adult Urology, January 18, 21, Sheraton Bal Harbour Hotel, Miami Beach. For information: Victor A. Politano, M.D., 6614 Miami Lakes Drive East, Miami Lakes 33014, (305) 687-1367.

Treatable Life Threatening Cardio-Pulmonary Episodes, January 20-21, Diplomat Hotel, Hollywood. For info.: Marvin L. Meitus, M.D., 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

Continuing Education in Pediatrics, January 22-26, Diplomat Hotel, Hollywood. For information: Donald Altman, M.D., 6125 SW 31st St., Miami, FL 33155.

Sixth Annual Walt Disney World Pulmonary Wintercouse, January 26-29, Hotel Royal Plaza, Lake Buena Vista. For information: M. Braunstein, M.D., 5526 Arlington Road, Jacksonville 32211, (904) 743-2933.

Round Table Day, January 27, Diplomat Hotel, Hollywood. For information: Donald Altman, M.D., 6125 SW 31st St., Miami 33155, (305) 666-6511.

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References: 1. Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

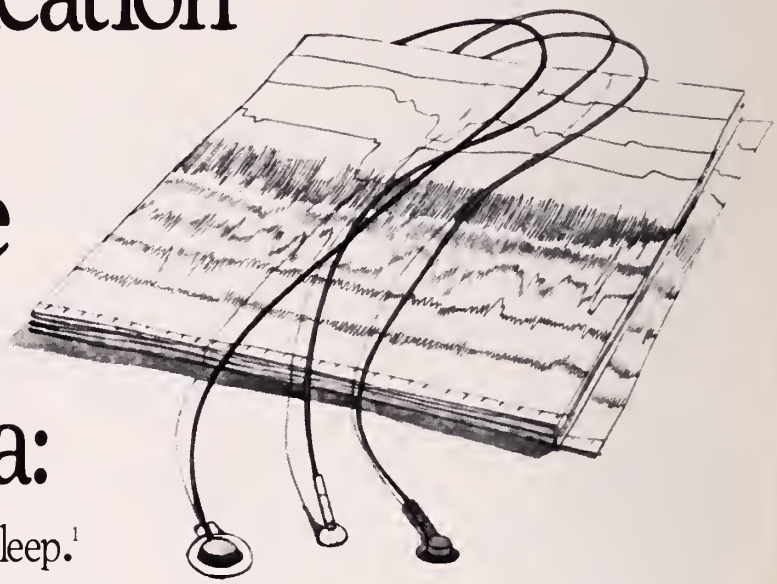
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Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown, but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia, some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

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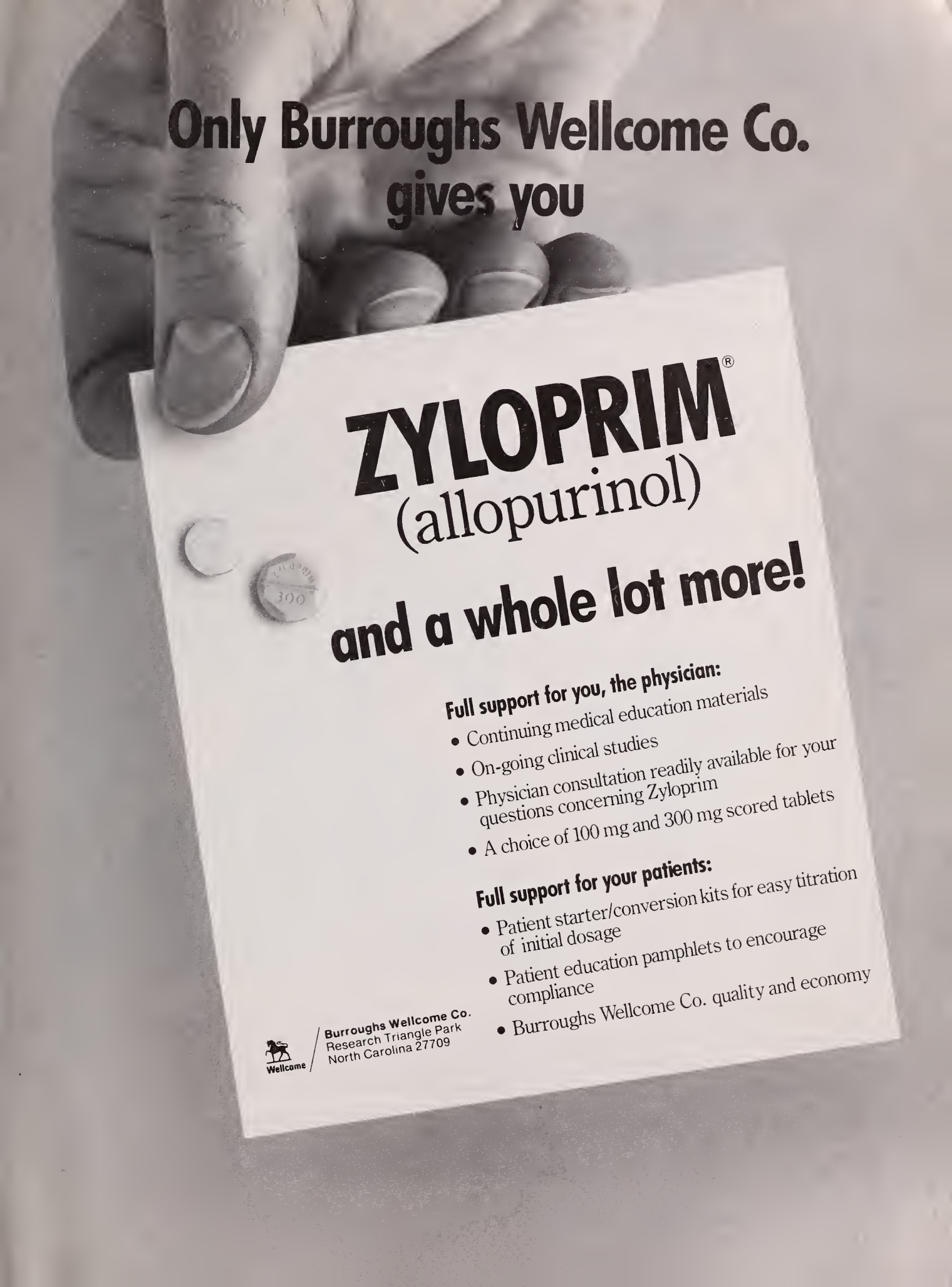
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Brief Summary of prescribing information

RU-TUSS®

TABLETS

INDICATIONS AND USAGE: Ru-Tuss Tablets provide relief of the symptoms resulting from irritation of sinus, nasal and upper respiratory tract tissues.

CONTRAINDICATIONS: Hypersensitivity to antihistamines or sympathomimetics. Ru-Tuss Tablets are contraindicated in children under 12 years of age and in patients with glaucoma, bronchial asthma and women who are pregnant. Concomitant use of MAO inhibitors is contraindicated.

WARNINGS: Ru-Tuss Tablets may cause drowsiness. Patients should be warned of possible additive effects caused by taking antihistamines with alcohol, hypnotics, sedatives or tranquilizers.

PRECAUTIONS: Ru-Tuss Tablets contain belladonna alkaloids, and must be administered with care to those patients with urinary bladder neck obstruction. Caution should be exercised when Ru-Tuss Tablets are given to patients with hypertension, cardiac or peripheral vascular disease or hyperthyroidism. Patients should avoid driving a motor vehicle or operating dangerous machinery (See WARNINGS:).

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ADVERSE REACTIONS: Hypersensitivity reactions such as rash, urticaria, leukopenia agranulocytosis, and thrombocytopenia may occur. Other adverse reactions to Ru-Tuss Tablets may be drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension/hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerostomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, dizziness and insomnia. Large overdoses may cause tachypnea, delirium, fever, stupor, coma and respiratory failure.

DOSAGE AND ADMINISTRATION: Adults and children over 12 years of age, one tablet morning and evening. Not recommended for children under 12 years of age. Tablets are to be swallowed whole.

Federal law prohibits dispensing without prescription.

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PRESIDENT'S PAGE

To the medical student . . . tomorrow's physician



In May, 1976, at the Annual Meeting of the Florida Medical Association, the first medical student delegate was seated. Medical student delegates have been a part of the House of Delegates ever since. In 1981, Sanford A. Mullen, M.D., the 105th President of the Florida Medical Association appointed a medical student to the Board of Governors, the governing body of the Florida Medical Association which carries out the policies and decisions of the House of Delegates. A medical student member of the Board of Governors has been continued by President Windom in 1982 and myself in 1983. The medical student representatives have served well and continue a valuable perspective to the deliberations and activities of the Board of Governors.

In June of 1983, the Board of Governors made an important decision in support of the Editor of *The Journal of the Florida Medical Association, Inc.* to provide a year's subscription to *The Journal* to all senior medical students at Florida's three medical schools. This September issue is the first issue of *The Journal of the Florida Medical Association, Inc.* received by the students under this new program. It is a unique and special pleasure for me to have the opportunity to invite each of you to become interested and involved in the activities of organized medicine. Soon each of you will be graduating and entering residency training. As a future practicing physician you will establish the practice patterns of tomorrow. Your early involvement and concerns about access to health care, health manpower distribution, quality of medical practice, cost of medical care, medical ethics, and professional liability are but a few of the difficult problems facing all of us in the future.

The medical student and resident sections of the American Medical Association are very active and valuable groups of participants in influencing future directions of medicine, and the attitudes of the practitioner and the public. The earlier you become involved, the earlier you will become aware of the various factors influencing our great profession. It is very important that each of us use our capabilities and talents to the benefit of the health and welfare of the public.

On behalf of the Florida Medical Association each of you are to be congratulated upon reaching this important point in your career. May your future be filled with joy and fulfillment as you pursue your different careers in medicine.



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SECOND ANNUAL CARDIOLOGY UPDATE, CORONARY ARTERY DISEASE 1983

Sundial Beach & Tennis Resort
Sanibel Island, Florida

October 13-16, 1983

Faculty: Michael D. Danzig, M.D., F.A.C.C., Staff Physician Southwest Florida Heart Institute; Richard H. Davis, M.D., F.A.C.C., Staff Physician Southwest Florida Heart Institute; Jack Edwin Dawson, M.D., Clinical Assistant Professor of Medicine, Medical Director of Stress Management Foundation; Robert S. Eliot, M.D., F.A.C.C., Professor of Cardiology and Chairman, Department of Preventive and Stress Medicine, University of Nebraska Medical Center, Omaha; Laurence A. Grossman, M.D., F.A.C.C., Clinical Professor of Medicine-Cardiology at Vanderbilt School of Medicine, Nashville; James R. Pluth, M.D., Professor of Surgery, Mayo Clinic, Rochester; Jeffrey H. Rosen, M.D., F.A.C.C., Staff Physician Southwest Florida Heart Institute; Peter H. Segall, M.D., F.A.C.P., Staff Cardiologist and Director Medical Intensive Care Complex, Mt. Sinai Medical Center, Miami; Harvey Tritel, M.D., F.A.C.C., Staff Physician Southwest Florida Heart Institute; Thad F. Waites, M.D., F.A.C.C., Staff Physician Oschsner Clinic; Nannette K. Wenger, M.D., F.A.C.C., Professor of Medicine (Cardiology), Emory University School of Medicine, Director, Cardiac Clinics and Director Program for Cardiac Evaluation and Medical Vocational Rehabilitation, Grady Memorial Hospital, Atlanta.

THURSDAY, OCTOBER 13th

ANGINA

Dr. Harvey Tritel, Presiding

10:30 Registration
12:30 *The Ischemic Syndrome,* Dr. Harvey Tritel
1:10 *Pathophysiology and Management of Angina,* Dr. Laurence A. Grossman
2:10 *Angioplasty,* Dr. Thad Waites
3:00 Coffee
3:15 *Acute (In-hospital) Treatment of the Patient with Angina,* Dr. Peter H. Segall
4:05 Panel Discussion, *Long Term Treatment of the Patient with Angina,* Drs. Grossman, Segall, Tritel and Waites
5:00 Adjournment
6:00 Complimentary Wine and Cheese Party

FRIDAY, OCTOBER 14th

MYOCARDIAL INFARCTIONS

Dr. Michael D. Danzig, Presiding

8:00 Continental Breakfast
8:30 *Complications of the Myocardial Infarction,* Dr. Michael D. Danzig
9:10 *Streptokinase,* Dr. Thad Waites
10:00 *Anti-Arrhythmics,* Dr. Harvey Tritel
10:30 Coffee
10:50 *Limiting Infarct Size,* Dr. Laurence A. Grossman
11:40 *Acute (In-hospital) Management of Myocardial Infarction Patients,* Dr. Peter H. Segall
12:30 Panel Discussion, *Long Term Management of Myocardial Infarction Patients,* Drs. Danzig, Grossman, Segall, Tritel and Waites
1:30 Adjournment

SATURDAY, OCTOBER 15th

PREVENTIVE MEDICINE

Dr. Harvey Tritel, Presiding

8:00 Continental Breakfast
8:30 *Cardiac Rehabilitation,* Dr. Nannette Wenger
9:30 *Stress — Is It Worth Dying For? (Part I),* Dr. Robert S. Eliot
10:30 Coffee
10:45 *Stress — Is It Worth Dying For? (Part II),* Dr. Robert S. Eliot
11:45 *Effects of Mental and Physical Stress on Cardiovascular Problems,* Dr. Jack E. Dawson
12:45 *Stress Management Techniques,* Dr. Harvey Tritel
1:15 Panel Discussion, *Stress Management,* Drs. Dawson, Eliot, Tritel and Wenger
2:00 Adjournment
6:00 Cocktail Party

SUNDAY, OCTOBER 16th

RECENT ADVANCES

Dr. Jeffrey H. Rosen, Presiding

8:00 Continental Breakfast
8:30 *New Advances in Pacing,* Dr. Jeffrey H. Rosen
9:40 *Anticoagulants,* Dr. Nannette Wenger
10:30 Coffee
10:45 *Coronary Artery Disease,* Dr. James R. Pluth
11:25 *Anti-Hypertensive Therapy,* Dr. Richard H. Davis
12:05 *Choosing the Appropriate Prosthesis,* Dr. James Pluth
12:40 Panel Discussion, *Recent Advances,* Drs. Davis, Pluth, Rosen and Wenger
1:30 Adjournment

Accreditation: Eighteen hours of post graduate education credit have been applied for to include Medical Doctors, Osteopathic Physicians and Nurses.

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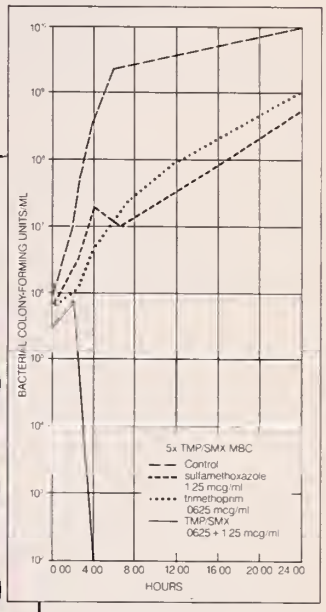
Bactericidal activity with minimal resistance

Percent of isolates of common uropathogens sensitive to BACTRIM and to other antimicrobials

	Escherichia coli	*Klebsiella pneumoniae*	*Proteus mirabilis*	*Proteus vulgaris*	*Proteus sp.*	*Enterobacter sp.*	*Enterobacter aerogenes*	*Enterobacter cloacae*
BACTRIM	**96%** 328,598	**89%** 63,551	**93%** 62,691	**84%** 4174	**91%** 4381	**88%** 1736	**96%** 7326	**92%** 11,856
ampicillin	72% 345,209	5% 65,466	85% 67,338	16% 4381	70% 4402	10% 1775	9% 7759	11% 12,091
cephalexin†	81% 343,339	85% 67,031	92% 67,027	16% 4398	80% 4365	22% 1834	13% 7571	12% 11,846
nitrofur-antoin	97% 307,785	65% 61,162	7% 59,775	13% 3848	14% 3059	67% 1707	60% 7109	67% 10,830

†Analogous to cephalothin, the primary antibiotic disc used in testing.
Source: The Bacteriologic Report, BAC-DATA Medical Information Systems, Inc., Winter Series, 1981-82.
Numbers under percentages refer to the projected number of isolates tested.

RAPID *IN VITRO* DESTRUCTION OF *E. COLI**



Kill curve kinetics of Bactrim and its individual components against *E. coli in vitro*.[1]

The bactericidal action of Bactrim has been demonstrated *in vitro* on laboratory strains of *E. coli*[1,2] and on clinical isolates of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis* and *Morganella morganii*[3]—the most common causative organisms of urinary tract infections.[4] More than 100 published studies attest to the efficacy of Bactrim in recurrent urinary tract infections due to these organisms.[5] In comparative studies with other antimicrobials, Bactrim has consistently demonstrated unsurpassed efficacy during therapy.[6-11]

Resistance to Bactrim develops more slowly than to either of its components alone *in vitro*.* Among urinary tract isolates, resistance has rarely emerged in susceptible strains.[5,12] Bactrim is contraindicated in pregnancy at term, during lactation, in infants less than two months old and in documented megaloblastic anemia due to folate deficiency.

Initial episodes of uncomplicated urinary infections should be treated with a single-agent antimicrobial.

Bactrim™ DS

(trimethoprim and sulfamethoxazole/Roche)

b.i.d. *for recurrent urinary tract infections*

**In vitro* data do not necessarily predict clinical results.

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See next page for references and a summary of product information.

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ 2. Kramer MJ, Maunz YR, Robertson TL, Timmes MD: Morphological studies on the effect of subinhibitory and inhibitory doses of sulfamethoxazole-trimethoprim combination on *Escherichia coli*. Presented at the 12th International Congress of Chemotherapy, Florence, Italy, Jul 19-24, 1981. 3. Spicehandler J *et al: Rev Infect Dis* 4:562-565, Mar-Apr 1982. 4. Stamey TA: *Pathogenesis and Treatment of Urinary Tract Infections*. Baltimore, Williams & Wilkins, 1980, p. 13. 5. Ronald AR: *Clin Ther* 3:176-189, Mar 1980. 6. Cooper J, Brumfitt W, Hamilton-Miller JMT: *J Antimicrob Chemother* 6:231-239, 1980. 7. Gower PE, Tasker PRW: *Br Med J* 1:684-686, Mar 20, 1976. 8. Cosgrove MD, Morrow JW: *J Urol* 111:670-672, May 1974. 9. Iravani A *et al: Antimicrob Agents Chemother* 19:598-604, Apr 1981. 10. Schaefter AJ, Flynn S, Jones J: *J Urol* 125:825-827, Jun 1981. 11. Rous SN: *J Urol* 125:228-229, Feb 1981. 12. BAC-DATA Medical Information Systems, Inc., Bactenologic Reports, Winter Series, 1976-82.

Bactrim™ DS

(trimethoprim and sulfamethoxazole/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, hepatocellular necrosis, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients. *Pregnancy:* Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, hepatocellular necrosis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: *Not recommended for infants less than two months of age.*

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 20. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per tea spoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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References:
1. Stone PH, Turi ZG, Muller JE: Efficacy of nifedipine therapy for refractory angina pectoris. *Am Heart J* 104:672-681, September 1982.
2. Antman E, Muller J, Goldberg S, et al: Nifedipine therapy for coronary-artery spasm: Experience in 127 patients. *N Engl J Med* 302:1269-1273, June 5, 1980.

BRIEF SUMMARY

PROCARDIA® (nifedipine) **CAPSULES** For Oral Use

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm or when angina is refractory to nitrates and or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and or increased fluid volume requirements have been reported in patients receiving PROCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out. In PROCARDIA treated patients where surgery using high dose fentanyl anesthesia is contemplated, the physician should be aware of these potential problems and, if the patient's condition permits, sufficient time (at least 36 hours) should be allowed for PROCARDIA to be washed out of the body prior to surgery.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: General: Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug interactions: Beta-adrenergic blocking agents. (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PROCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers. The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, if is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nitedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients. Transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication. Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nitedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature.

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J-9043-4 July 1981

EDITORIAL

Physicians — responsible guardians of public funds — the perinatal program

Life expectancy in this country has increased over the past decade, a result which has been ascribed in part to decreased infant mortality. At the same, time, life expectancy in the older age groups has also increased while illnesses have decreased, and this improvement in health has been ascribed by some to certain dietary or social-environmental factors.

At the same time that these health improvements have been occurring, the medical profession has been castigated for increasing its share of the gross national product. One sector which has received the blunt of the blame of increased costs is that which cares for the low-birthweight infant. The unfairness of this judgment can be attested to not only by those parents who now have living, and usually healthy, children, but also by those who are aware of the age-old dictum which respects neither the economics of capitalism nor communism, namely that "one gets what one pays for".

If one looks at some of the epidemiological factors that have extended life at the older ages, one is impressed that the lengthening of the life span began before the "prudent diet" of lower fat intake, and before major improvements in environmental factors were instituted. While the incidence of lead poisoning has decreased with the use of unleaded gasoline, and the incidence of lung cancer and perhaps other diseases decreases with the cessation of cigarette smoking, examination of mortality data over the past 30 years seems at least to this observer to correspond more closely to the institution of health insurance including Medicaid, Medicare, and our own Department of HRS, and thus to the availability of care by physicians, and almost as closely to the institution of those programs which categorically supply food.

Improved physician availability and food programs do not negate the importance of other programs when proven helpful. Even in the care of the neonate it is recognized that smoking in the household, especially by the parturient, leads to an increase in the incidence of low-birthweight high-risk infants, and drugs and alcohol taken by the mother lead to even worse risks. However, these do not support the use of fad diets, multiple vitamins, hair analysis, etc. which are unproven preventive factors and which in toto approach the expenditures presently available for the care of the newborn.

The perinatal program in Florida, a model for many other states, is a start in the right direction. The value of physicians in improving this care is one example of the importance of providing support for physicians, and should serve to quell some of the negative comments concerning physicians in general. Further extension and improvements in the perinatal program will soon be shown to be not only life-effective but also cost-effective. Physicians have been shown to be responsible guardians of public funds.

Lewis A. Barness, M.D.
Tampa



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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION, INC.
SEPTEMBER 1983 Vol. 70 No. 9

Special Issue on Perinatology

Preface

Neonatal-Perinatology

After years of germination, a neonatal-perinatal intensive care program was begun in Florida. Considerable advances have been made these past ten years in preventing the occurrence of birth before term, in management of mothers at high risk for preterm deliveries and abnormalities, in care of low birth weight infants, and in recognition and rapid treatment of infants with treatable conditions to prevent later disease.

The editors have assembled a group of articles from participants in this program, many of whom have been involved since its inception. These articles document several of the effects and, hopefully, advances of the program. They also document problem areas where solutions must be sought before another decade passes.

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Special edition of Florida Medical Association Journal

Florida was one of the first states to establish and fund a comprehensive statewide neonatal intensive care program. We are extremely proud of this program administered by the Department of Health and Rehabilitative Services' Childrens' Medical Services. After ten years experience, the value of this essential care has been repeatedly proven as summarized in this issue of *The Journal of the Florida Medical Association.*

Establishing and improving the program has presented us with considerable challenges. With better identification of infants who can benefit from this care, the demands sometimes strain our abilities; however, this program and the state's other efforts in the area of perinatal care have continued to grow. Funding has increased and services have been expanded. For example, in a significant move, Florida established a system of step-down care which has helped to relieve some of the demands placed on our most sophisticated neonatal intensive care centers.

We will continue to face challenges; however, we have a firm commitment to provide the best care available to these children. To do this, it is essential that we maintain the effective cooperative relationship established between state government, private physicians, and hospitals. Together we can insure that the benefits and the resources of our medical community keep this state in the vanguard of those providing perinatal care in the nation.

I congratulate the leaders of the Florida Medical Association for their cooperation and support, and I commend this most important special edition of *The Journal.*

Bob Graham, Governor
Tallahassee

Prevention: cornerstone for the future

As we move toward the 21st century, humankind's ability to improve the quality of life continues to reach unprecedented heights. In our lifetime once deadly diseases such as smallpox have been eradicated and technology developed which enabled Medicine to keep a man alive with a mechanical heart. Equally important, health care systems are moving beyond the immediacy of healing to an era of substantially improving the state of health of all Floridians.

A newborn child has a better chance of reaching his or her first birthday than at any other time in this nation's history. Advances in medicine, particularly prenatal and neonatal care, have seemed to occur each day during the past ten years.

As we learn more about the complexities of caring for at-risk newborns, we concurrently embrace an age-old tenet physicians have been telling pregnant women for years — an infant's quality of life can be predestined by the care given to the mother. In other words, a commitment to prevention is the key to providing comprehensive prenatal and neonatal care.

Prevention is the cornerstone of the Children's Medical Services Program. Governor Bob Graham's budget priorities for the next two years recognize that prevention services, whether they be programs to prevent child abuse, delinquency, disease or disability, are an important investment in the future — and that investment must increase now for us to reap benefits in the future.

The child abuse prevention program is a good example of this approach. In the past, we have almost exclusively concentrated on the tragic victims of abuse — the child who comes to school with burn marks on his arms or a black eye. What we now recognize is that parents are also victims. The greatest tragedy of child abuse is its insidious cyclical nature — children who are abused will, in too many cases, grow up into adults who abuse their own children.

Florida is paying today for a prior generation's failure to deal with the causes of the problem — familial distress, economic blight, emotional disorder, parental inadequacy — the people and environments which created today's abusers. It is time to break the cycle.

The passage of the Child Abuse Prevention Act (Mills Bill) in 1982 was an important step toward placing increased emphasis on developing child abuse prevention programs for the future. The Child Protection teams are also essential to the state's effort to intervene in an abusive family situation and prevent future abuse.

Prevention, specifically early intervention, is the foundation of the state's Regional Perinatal Intensive Care Centers (RPICC) Program.

Before the Program was started in 1974, Florida's neonatal mortality rate was 13.6 per 1,000 live births. The services provided by RPICC in obstetrics, neonatal care and developmental evaluation since that time have, no doubt, contributed to a decline in maternal and fetal mortality and morbidity rates as well as a drop in the neonatal mortality rate to 8.9 per 1,000 live births in 1981.

Just as importantly, the Program has taught us that indigent high-risk mothers who receive appropriate prenatal care have babies that require less time in neonatal intensive care units than would normally be expected. This results in reduced costs and increased chances for a normal, healthy baby.

Pregnant women and newborns, particularly those from low-income families, represent a population that will continue to need costly health services. But if we can get quality health care to those women during their pregnancies, we will have fewer infants in our intensive care facilities and fewer people with disabilities that use up state services and resources.

As we look to the future of Florida's prenatal program, we are faced with a dilemma that has become all too common in this age of high-tech medical care. As the technology becomes more complex, it also becomes more expensive and therein lies a paradox. We have the technology to keep more babies alive. This increases the demand which, combined with the cost of the necessary technology, makes more money not enough.

Again, one answer lies in prevention, but that answer will not come quickly or easily. Prevention is an investment in the future. Our commitment today can and will mean a better life for children tomorrow.

David H. Pingree, Secretary
Department of Health and Rehabilitative Services
Tallahassee

Need for the Florida infant hearing screening bill

It was brought to my attention that methods have been developed so that hearing deficits can now be detected with reasonable accuracy during the first few months of life and that diagnosis and treatment can greatly reduce the effects of the impairment.

I asked my staff to investigate the existence of infant hearing screening programs in Florida and nationwide and submit a report to me. Their report contained the following (1981):

(1) The only existing mandatory infant screening in Florida is designed to detect metabolic disorders (phenylketonuria, hypothyroidism, galactosemia and maple syrup urine disease). Routinely doctors and other medical personnel do not examine newborns for hearing defects at neonatal centers, newborn nurseries or physicians' offices.

(2) There are no federally-funded infant screening programs for hearing impairments in the United States and no state has provide funding for any statewide programs. Some states do, however, have a high risk registry which includes hearing impairments (New Jersey and Rhode Island), and other states are considering legislation to mandate statewide hearing screening of newborns (California, Michigan and Connecticut). A few states are implementing newborn hearing impairment screening and treatment programs on a limited basis (Colorado, Utah, Texas and Georgia).

(3) Neonatal hearing screening produces a higher yield of incidence in high risk neonates than do any of the neonatal screens currently mandated in Florida. Of the 132,000 annual live births in this state approximately 20,000 will be high risk. Of this high risk population as many as 1,000 infants could be expected to be identified as hearing impaired.

(4) There is a consensus within the educational and medical communities that auditory stimulation is essential to language acquisition in young children. Research has shown that even mild hearing loss adversely affects language development and academic achievement. Furthermore, once an infant leaves the hospital, there is an average delay of two and a half to three years before a hearing impairment diagnosis is reached. At two and a half years of age, the majority of normal hearing babies are speaking in full sentences.

The Child Health Division of the Department of Health and Human Services indicated that if an investment is not made in the early detection of deafness in infants the long-term costs for special education, medical and welfare services will far exceed the short-term costs of identification.

The goal of any newborn screening program is to identify anomalies as early as possible so that intervention strategies can be applied, thus preventing further complications. A newborn hearing loss protection program seeks to identify hearing impairments present at birth so that educational programs and training can be instituted as soon as possible to allow the hearing impaired child to attain his best functioning.

All of these considerations led me, together with Representatives Bell and Haben to support an infant hearing screening bill which mandates the establishment of a registry for children at risk for hearing difficulties and to establish five pilot projects to screen, refer for proper care, and coordinate with the Department of Education.

H. Lee Moffitt
Speaker of the Florida
House of Representatives
Tallahassee

Regionalized neonatal/ perinatal intensive care center program: a political history

Gerold L. Schiebler, M.D. and Stephen A. Freedman, Ph.D.

ABSTRACT: With the creation of the Division of Children's Medical Services (CMS) in 1973, the Florida Legislature provided a vehicle to assure that the medical needs of children of this state would become a regularly considered item on the public agenda. One of the first major initiatives of CMS was to address the needs of high risk and critically ill newborns through the development of a statewide system of neonatal/perinatal intensive care. The political history of that development stands as a symbol of what can be achieved for children when health care professionals and key legislators commit themselves to a collaborative effort in the public interest.

The Authors
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Dr. Schiebler is Professor and Chairman and Dr. Freedman is Associate Chairman for Management, Department of Pediatrics, University of Florida College of Medicine, Gainesville.

In order to understand the reason for the statewide interest in the regionalized neonatal/perinatal intensive care center system, one must answer the question, "How does politics enter in the process of acquiring high technology?" While there are a number of answers to that question, three emerge as the most significant: cost, access and quality. These three responses interact and cannot be considered separately.

As a matter of pride, many communities may wish to bear the cost of installing high technology care at their local hospitals. Such communities use the argument that access to the desired technology is vital to their constituents' well-being. While the installation of high technology hardware may satisfy the local political desire to have access, questions related to the quality of the application of the technology are frequently omitted from public debate. Typically, when one examines the local access argument, one discovers that initial capital cost is the ascendent public issue. The relationship between long term costs and maintenance of quality is often obscured.

With the Health Systems Agencies' institutionalization of public debate over the acquisition of high technology health care, the cost/access/quality triad has become a universal argument in support of regionalization. Since the desires of many adjacent communities or closely clustered hospitals to have high technology health care are no longer being honored, regionalization of such care affecting multiple communities takes on a broader political context. Regionalization is a political question because it affects multiple communities. As the issue of a regionalized service emerges in the public forum, advocacy groups representing subpopulations which might be excluded from access by geography or costs assert their interests and concomitantly their influence. Government provides the forum for the mediation and negotiation of those interests.

Once government involves itself in the political process, it must develop guidelines for judging the arguments of various interests. In the finest example of such government intervention, guidelines have taken the form of objective standards developed by the professionals most knowledgeable regarding the proposed technology. Once decisions are made regarding the regional distribution of a high technology service, government becomes the responsible party to assure uniform access and quality.

Regionalized neonatal/perinatal intensive care center system - the model • In 1973, the Division of Children's Medical Services (CMS) was established by an act of the legislature as the state's lead agency responsible for all publicly suppported child health care programs. At that time, five neonatal intensive care centers existed. They served primarily indigenous populations and were not linked together in any coordinated fashion. As a consequence, access to this new and important advance in medicine was not uniform. CMS was the opportunity to assume responsibility for assuring access to all newborns needing that form of care. Early analysis revealed that knowledge of the availability of neonatal intensive care services in the larger medical communities was very limited. A decision was made by the leadership of CMS to support the statewide development of the neonatal intensive care unit (NICU) movement by addressing seven desirable improvements.

First was to stimulate communications among existing centers; second, to develop qualitative standards for evaluation of existing and proposed centers; third, to develop a statewide referral system to assure maximal utilization of existing resources; fourth, to expand access through development of rapid transportation resources and additional, geographically distributed beds; fifth, to cooperatively control the development of new NICU's to avoid geographic maldistribution; sixth, to provide an outreach education program to a wide variety of health care professionals to assure appropriate and timely referrals of infants in need of this new service, and the disseminaiton of knowledge regarding appropriate community based post-discharge aftercare; seventh, to concurrently implement an ongoing, independent, longitudinal evaluation conducted by professionals not engaged in the care of the infants.

At the earliest stages of planning it was apparent that in order for CMS to solicit the cooperation of existing centers, an infusion of new financial support would be required. The leadership of CMS approached the existing centers to assess their willingness to collaborate in development of a statewide program. Once consensus was established, the next step was to secure the financial resources to permit the existing centers to provide the quality and quantity of service consistent with the desired new program.

In order to achieve the desired end, i.e., substantial new resources to support the proposed program, a plan of action was implemented. Since all governmental programs compete with each other for resources, it was recognized that neonatal intensive care had to be made understandable and attractive to the political leadership. Two key arguments were put forth. First and least persuasive was the argument that there was a humanitarian responsibility to avoid the tragic consequences of inappropriately serving sick and premature infants. Second and more persuasive was the argument that with a modest investment of support for neonatal intensive care, major existing and future costs could be avoided in the support of services for neurologically and physically imparied citizens of the state.

These arguments were formally articulated in August 1973, by Dr. Benjamin A. Johnson, interim Director of the Division of Children's Medical Services, and Dr. Richard J. Boothby, a neonatal/perinatal intensive care advocate from Jacksonville. As a result of their persuasive skills, Secretary of the Department of Health and Rehabilitative Services, O.J. Keller incorporated their proposal as one of his administration's new initiatives in the 1974-75 legislative budget request. Armed with those arguments, Dr. Johnson and Secretary Keller succeeded in convincing Governor Reubin Askew to propose this new initiative to the Florida legislature. Under an agreement with the Governor's office, CMS was to seek a legislative appropriation of $1 million.

In November 1973, the first permanent Director of CMS, Dr. Gerold L. Schiebler, was appointed by Secretary Keller with concurrence of Governor Askew. As a condition of his appointment Dr. Schiebler requested liberal access to the Secretary and the Governor and his staff during the formative period of the new agency. With that access granted, Dr. Schiebler secured permission to review and revise the proposed 1974-1975 legislative budget request. Among the revisions was an increase to $1.5 million in the amount to be sought for the Regional Neonatal Intensive Care Program (RNICC). Included in the reasons for the revision was the newly added requirement for a continuing, comprehensive evaluation system to be conducted by professionals other than those engaged in rendering the specialized care. Two senior staff members of the Askew administration assisted in assuring that the revised budget met the high standards required for legislative consideration of such a complex proposal — Joseph P. Cresse, Director of the Division of the Budget, and A.H. "Fred" Baldwin, Chief of the Bureau of the Budget.

Prior to the 1974 legislative session, Dr. and Mrs. Lewis A. Barness hosted a dinner meeting at their home to discuss the proposed RNICC program with Dr. Richard S. Hodes, a physician-legislator whose support was essential to success of the proposal. Dr.

Barness and the other physicians attending the meeting, the late Dr. Louis E. Cimino, Drs. John S. Curran, Gerold L. Schiebler, Donald N. Smith, and Nelson J. Spoto, were asked two critical questions by Dr. Hodes: How much would a fully implemented statewide system cost to operate? How would the incidence of developmentally impaired children be affected? The responses to those questions were: an adequate statewide system of neonatal/perinatal (pediatrics and obstetrics) intensive care would cost approximately $20 million at 1973 prices; and the incidence of developmentally impaired children should dramatically decrease. As a result of that meeting, Dr. Hodes became the first key legislator to actively advocate the proposed RNICC appropriation.

It was clear that expectation for additional political support should be focused on key legislators sitting on the appropriate House and Senate committees, especially those legislators representing localities with the existing centers that would be perceived as benefiting most directly by the proposed appropriation. Those centers were located in Pensacola, Jacksonville, Gainesville, Tampa and Miami. During the 1973 legislative session, leadership from these areas was as follows:

Pensacola	Rep. Edmund Fortune, Chairman of Appropriations Committee, House of Representatives
Jacksonville	Rep. Earl Dixon, Chairman of Appropriations Subcommittee on Health and Rehabilitative Services, House of Represenatives
Gainesville	Sen. Robert Saunders, Chairman of Ways and Means Committee, Senate
Tampa	Rep. Richard S. Hodes, M.D., Chairman of Health and Rehabilitative Services Committee, House of Representatives
Miami	Sen. Kenneth Myers, Chairman of Health and Rehabilitative Services Committee and Chairman of Ways and Means Subcommittee on Health and Rehabilitative Services, Senate

It was conceded by CMS leadership that simply proposing the program and its benefits in competition with roads, education, agriculture and tourism probably would not yield the desired results. Consequently, it was clear that local political action would be necessary to influence those key legislators in favor of the establishment of a regional neonatal intensive care system.

Local individuals who were involved in the initial planning of the proposed program were encouraged to develop an active and ongoing dialogue with the key legislator from their respective area. The individuals who played a major role in support of the proposal were:

Pensacola	Dr. W. Reed Bell; Sister Carol Keehan (Administrator of Nursing Services at Sacred Heart Children's Hospital); Dr. Edward R. Westmark, and Dr. John H. Whitcomb.
Jacksonville	Dr. Richard J. Boothby; Dr. R. Donald Garrison, and Dr. Richard G. Skinner Jr.
Gainesville	Dr. Edmund F. Egan; Dr. Donald V. Eitzman; Dr. Gerold L. Schiebler, and Dr. James L. Talbert
Tampa	Dr. Lewis A. Barness; the late Dr. Louis E. Cimino; Dr. John S. Curran, and Dr. Richard S. Hodes, a key member of the Florida legislature who committed himself to the concept and influenced his colleagues in that body
Miami	Dr. Eduardo Bancalari; Mr. Lynn B. Clarke (Governmental Liaison to the Legislature for the University of Miami); Dr. William W. Cleveland, and Dr. Robert J. Grayson
Statewide	Local District CMS Medical Directors; leadership of the Florida Heart Association (Mr. Henry F. Hunter, Executive Director); Florida Pediatric Society; Florida Chapter of the American Academy of Pediatrics, and Florida Perinatal Association under the leadership of Dr. Richard J. Boothby

As a result of the efforts of those individuals and organizations to provide appropriate and timely information to key legislators, an appropriation of $1.5 million ($300,000 per existing site) was made to Children's Medical Services to support its efforts to initiate a statewide program in neonatal intensive care.

Since inception of the Regionalized Neonatal/Perinatal Intensive Care Center Program (RN/PICC) political support has continued and expanded. Principal among key individuals recently providing that support are Governor Bob Graham, Secretary David

H. Pingree of the Department of Health and Rehabilitative Service, Representative Samuel P. Bell III, of the House of Representatives, and Senator Robert W. McKnight of the Senate. Their support, along with the support of many others, have made substantial improvements in the RN/PICC program and its bases of support.

A few of these outstanding improvements are:

- Requirement for an open, statewide admission policy at all RN/PICC's.
- Establishment of objective standards for facilities and personnel, and for the external evaluation of program outcomes.
- Modification of Florida's insurance laws to require coverage under family health insurance policies of all newborns, from birth.
- Requirement for family health insurance to cover at least $1000 in transportation costs related to access to RN/PICC care.
- Automatic, separate and concurrent coverage under the Medicaid program for a period of 60 days for all newborns of Medicaid recipient mothers.
- Financial and programmatic support for decentralized stepdown care.
- Grant-in-aid system of funding which assures each RN/PICC a fixed level of governmental support while permitting the centers to garner and keep all third party payments in amounts up to their actual costs.
- Assurance of governmental support for transportation notwithstanding the financial or insurance status of the family.
- Approximately a 17-fold increase in state financial support between 1974 and 1982.

Over the past ten years continuity of commitment has been manifest by incumbents of the Office of Director of CMS, Dr. Nicholas Alexiou, Dr. Steve A. Freedman, Dr. Martin L. Schulkind, Dr. Louis B. St. Petery, and Dr. Julia R. St. Petery. Under the current leadership of Dr. William W. Ausbon those early efforts have blossomed into a statewide, regionalized neonatal/perinatal intensive care center program involving the authorization of ten regional centers with a budget of more than $25 million.

As a result of implementation of the program the original seven objectives have been met and morbidity and mortality rates among sick and premature infants in Florida have plummeted below the national average. Florida's regionalized neonatal/perinatal intensive care center system is frequently used as a model by other states in their attempt to secure similar achievement. This system stands as a positive symbol of what can be achieved for children when health care professionals and key legislators commit themselves to a concerted cooperative effort.

● Dr. Schiebler, Department of Pediatrics, University of Florida College of Medicine, Gainesville 32610.

Children's Medical Services: total health care

W. W. Ausbon, M.D.

ABSTRACT: Children's Medical Services, a unique relationship between the state of Florida and the private medical sector, is described. Emphasis is placed on the developmental and operational aspects of the Regional Perinatal Intensive Care Centers. Other medical services offered through Children's Medical Services are briefly described.

The Author
W. W. AUSBON, M.D.
Dr. Ausbon is Director of Children's Medical Services, Florida Department of Health and Rehabilitative Services.

Children's Medical Services of the Department of Health and Rehabilitative Services is a unique system organized to represent a partnership between the state and the private sector for provision of quality health care services to children and mothers. This issue is dedicated primarily to perinatal care, but an overview of other CMS programs seems appropriate.

The Regional Perinatal Intensive Care Centers (RPICC) Program in Florida is a statewide health care delivery system designed to provide optimum health care to women with high risk pregnancies and to sick/low birth weight newborns. Studies published by the National Foundation in "Toward Improving the Outcomes of Pregnancy" indicated that reductions in maternal, fetal and neonatal mortality rates could be achieved through early identification and provision of proper prenatal, perinatal and neonatal care in facilities such as those in Florida's RPICC system. These studies have indicated that mortality rates not only can be reduced but the rate of impairment in these infants can also be reduced. The need to establish a regionalized medical program for high risk infants that could impact in the state's neonatal mortality rate was recognized by the legislature in 1974. Funds were appropriated for five centers to be located in Alachua, Dade, Duval, Escambia and Hillsborough Counties. These funds were allocated to provide neonatal intensive care services as well as developmental evaluation follow-up for the infants served. The developmental evaluation component provides a mechansim for evaluating long-term consequences of the neonatal program.

Florida Statute 383.15-21 providing the statutory basis for the RPICC Program was enacted in 1976. Centers in Orange and Pinellas Counties were

designated at the same time. The statute was amended in 1977 to include provision of high risk obstetrical services and addition of three centers in Broward, Dade and Palm Beach Counties.

A statewide 24 hour toll-free Communication and Referral (CARE) line was established to facilitate patient access to Centers and to provide a consultant resource to referring physicians. Florida Statute 383.15-21 was again amended in 1980 to authorize the designation of a Regional Neonatal Intensive Care Unit as the second center in Dade County. An on-line data system was implemented in order to assess the impact of the RPICC on perinatal mortality and morbidity.

In 1982 the statute was further amended to remove the specific county requirement for designation of centers, and funds were appropriated for the development of stepdown special care centers to be located both within and outside the centers. These stepdown units will receive newborns directly from the neonatal intensive care unit thereby releasing space for more seriously ill neonates. Stepdown care centers located out of center areas are in Sarasota Memorial Hospital, Tallahassee Memorial Regional Medical Center, St. Vincent's Medical Center in Jacksonville, Baptist Medical Center in Jacksonville, and Memorial Medical Center of Jacksonville.

The Perinatal Program has served 31,006 newborns and 6,304 mothers since its inception. For the fiscal year 1981-82, 6,526 infants and mothers were served (4,414 infants and 2,112 mothers). It is anticipated that we will serve 5,543 infants and 2,609 mothers in fiscal year 1982-83.

The need for perinatal services has occasionally exceeded the availability of such services in Florida. The state's rapidly escalating birth population plus the large number of low birth weight infants are the main factors. Resources are needed to provide adequate prenatal care thereby reducing the low birth weight rate. Additional resources are also needed in order that all newborns and mothers may have appropriate care available to them in the RPICC's.

Through other programs, CMS offers services to over 50,000 chronically ill children annually. These children access care primarily through the clinic setting. There are 18 CMS clinics in the state, each under the direction of a locally practicing physician. Appropriate care is approved through the clinic setting and in CMS approved hospitals. In addition to the general program, other programs address specific needs.

The Infant Hearing Impairment Program provides for identification, diagnosis, and appropriate care of infants at risk for hearing impairments. The program is being piloted in five Regional Perinatal Intensive Care Centers and statewide expansion is planned for 1984. A central patient registry will be developed.

The Cleft Lip/Cleft Palate Cranio-Facial Anomalies Program is being developed concurrently with the Infant Hearing Impairment Program and will utilize the same central registry concept. CMS will develop standards for treatment of children with cleft lip/cleft palate and craniofacial anomalies with the advice of an 11 member advisory council.

The Infant Biological Screening Program requires testing of all infants prior to hospital discharge for phenylketonuria, hypothyroidism, galactosemia and maple syrup urine disease. The three medical schools provide diagnostic and treatment services to infants with abnormal results. There were 34 confirmed cases in 1982 and a total of 113 cases since the program's inception in 1980.

The Regional Genetics Program provides residents of Florida with genetic disease services including laboratory services, genetic counseling, referral and education. The services are provided through a network of facilities including the three university based genetic centers and a number of satellite genetic clinics.

The Cardiac Program offers three levels of services. Each of the CMS offices conducts general cardiac clinics for ongoing outpatient management. Cardiac catherization services are available in five locations. There are approved CMS pediatric cardiac surgical centers located in Jacksonville, Gainesville, St. Petersburg, and Miami.

The Diabetes Program is regionalized with teams based in Gainesville, Tampa and Miami. In addition to conducting clinics at the base location, the teams also provide outreach clinics for CMS and private patients at the CMS offices in their geographical catchment area. The program encourages age-appropriate medical self-management and offers 24 hour patient/physician telephone consultation services.

The Renal Program provides three levels of care. Screening is performed as needed on new CMS patients. Clinics provide renal/urological services on the local level and the Comprehensive Children's Kidney Failure Centers in Gainesville, Tampa and Miami provide tertiary level care including dialysis and transplantation for CMS patients with end-stage renal disease.

The Rheumatic Fever Control Program was organized to help prevent the condition and to improve prophylactic compliance in an effort to reduce recurrent attacks of rheumatic fever/rheumatic heart disese. Prophylactic medication as well as antibody testing to aid in the diagnosis of suspected cases is provided without charge.

The Child Abuse Program has established a statewide network of 15 multidisciplinary Child Protection Teams. Each team functions under the

supervision of a pediatric medical director and includes physicians, social workers, nurses, attorneys, psychologists, psychiatrists, and law enforcement liaisons.

The Spinal Cord Injury Program provides acute and rehabilitative services to financially eligible patients who have sustained traumatic spinal cord injury. Services are provided only in acute care and rehabilitative centers designated by the Department of Health and Rehabilitative Services.

Florida Statutes 402.212 authorized the establishment of a Hematology/Oncology Program. It is currently in the developmental stages and consists of local clinics and tertiary level care.

The Sudden Infant Death Syndrome (SIDS) Program provides information and counseling services to parents and families of SIDS cases in an effort to reduce the traumatic effects of the sudden loss of a child. The Program also allows for the provision of professional and public information in order to raise the index of suspicion and awareness of SIDS among physicians, nurses, and other health professionals, social workers, law enforcement personnel, medical examiners, funeral directors and others concerned.

These programs, in many instances, address the private as well as the indigent patient. Florida's CMS Program is seen by many states as a model organizational structure. It is hoped that through this structure many other health related issues will be addressed in the future to better meet the total health care needs of mothers and children.

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The nine regional perinatal tertiary care centers in Florida: an overview

Charles R. Bauer, M.D.

ABSTRACT: Since 1974 the Regionalized Perinatal Program in Florida has been growing and developing. Initiated through the cooperative efforts of neonatologists from five centers throughout the state; expanded to include obstetric and developmental components; formalized into law in 1976 via Florida Statute 383.15-21 to its present status as a highly efficient and complex organization now involving nine centers including special units in children's hospitals and complex neonatal surgery components, this program has resulted in a significant decrease in perinatal mortality and neonatal long-term morbidity.

The Author
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This project is supported by a grant-in-aid from the Department of Health and Rehabilitative Services, State of Florida, Children's Medical Services.

In 1973, through concerted efforts of neonatologists in Florida and with support of the pediatric community represented by Dr. Richard Boothby of Jacksonville, the Florida Regional Neonatal Intensive Care Program was initiated. In the ensuing ten years, this unofficial gathering of specialists who were attempting to coordinate their efforts and to obtain recognition as a pediatric subspeciality has grown into a complex medical, administrative and financial program unique in the United States and currently recognized as a model program.

In its beginning, neonatologists from Alachua (Shands Teaching Hospital/University of Florida), Dade (University of Miami/Jackson Memorial Medical Center), Duval (University Hospital/Jacksonville), Escambia (Sacred Heart Hospital/Pensacola), and Hillsborough (Tampa General Hospital/University of South Florida) Counties were actively providing information and leadership in the effort to gain recognition for this program. This recognition was awarded in 1976 when the Florida legislature formally authorized the program via Statute 383.15-21 and provided official funding. At that time additional centers were created in Orange (Orlando Regional Medical Center) and Pinellas (All Children's Hospital) Counties. A developmental evaluation component was established and required at each center to evaluate and report the ongoing progress of survivors of this specialized technical care. Through an amendment to the statute in 1977, an obstetric component was created and the change from a "neonatal" to a "perinatal" program was formalized. Additional centers in Palm Beach (St. Mary's Hospital), Dade (Miami Children's Hospital) and Broward (Broward General Hospital) Counties were authorized. These centers were created between 1978 and 1983 but various changes have resulted in only two being presently functional within the program

At present nine centers compose the Florida Regional Perinatal Program. Seven have combined obstetric-neonatal facilities, one has closely linked and physically adjacent obstetric-neonatal components which are in separate hospitals and one has special recognition as a Tertiary Care Neonatal Center in a children's hospital setting.

These centers communicate and cooperate within the program attempting to provide services to all mothers and infants in need of such care. However, in spite of expanded services, involvement with affiliated centers and stepdown type care and despite steadily increasing legislative funding, infants and mothers not actually admitted to and delivered within a regional center cannot be guaranteed care. A statewide "hotline" coordinates admissions among the nine centers and provides timely updates on the availability of bedspace in each center. However, on occasion, no bed has been available when needed for infants and/or mothers in the state. Progress in eliminating this problem is constantly being made through the expansion of services and the increased financial support for stepdown care and eventually intermediate level care.

Current Regionalized Florida Perinatal Intensive Care Centers • *Alachua County, Shands Teaching Hospital, University of Florida, Gainesville:* The Neonatal Intensive Care Center at the University of Florida was one of the five original centers. Initally the intensive care nursery had 12 beds. The developmental component was added in 1975 and the obstetric component in 1977.

Between 1974 and 1982 the number of neonatal patients increased from 491 to 566. The obstetric component cared for 40 patients in 1977 and 395 patients in 1981-82, a nine-fold increase. The developmental program had over 1300 patients and performed more than 4000 evaluations between 1976 and 1982.

In September 1978 a new 20-bed Intensive Care Center was opened and in November 1982 an eight bed Intermediate Care-Stepdown Center was opened which expanded to 12 beds in January 1983. In 1980 the obstetric program began to decrease the number of low-risk deliveries to make more beds available for the high-risk obstetric patient. Physicians are available for telephone consultation 24 hours a day. A Transport Team and Helicopter System were developed in 1982 to transport high-risk mothers from community hospitals in the state. This, with the Neonatal Transport Team which was developed in 1975, has made the Center readily accessible.

Outreach education has been an ongoing function of the program in accordance with the state contract. Programs have been conducted by the Obstetric Director and the Neonatal Director as joint continuing education accredited courses. Seventeen courses were given between April 1980 and February 1983 and were attended by nurses and physicians from the communities served.

Currently, ongoing neonatal research involves a Model Low Birthweight Neonatal Development Program, Home-based Early Childhood Intervention Program, In-house Infant Developmental Intervention Program, Clinical Infant Research Collaboration Center, Education/Training Program in Developmental Evaluation Techniques, Multimedia Education and Training Program and a project investigating the Relationship of Apgar Scores to Mortality and Morbidity.

Component Directors:		
Obstetrics:	Dr. Amelia Cruz	(904) 392-4066
Neonatology:	Dr. Richard Bucciarelli	(904) 392-6427
Development:	Dr. Michael Resnick	(904) 392-5911

Broward County, Broward General Medical Center, Fort Lauderdale: This center, although authorized in the 1977 legislative session, joined the program officially in October 1982. The hospital currently has ten intensive care beds and 20 stepdown nursery beds. Expansion of facilities is underway with plans for 64 neonatal beds, 25 dedicated to intensive care, which should be completed be September 1983.

In 1982 there were 5200 deliveries with 519 admissions to the neonatal center. Fifty-four percent (281) of these admissions had birthweights less than 2500 grams.

Component Directors:		
Obstetrics:	Dr. Herbert Magram	(305) 463-3131 Ext. 1202
Neonatology:	Dr. Gregor Melnick	(305) 463-4127
Development:	Dr. S. Widmayer	(305) 949-2510 Ext. 1729

Dade County, Miami Children's Hospital, Miami: The Miami Children's Hospital (MCH) has provided neonatal intensive care since the early 1970's; however, formal development began in 1974 with the addition of a full-time neonatologist. Starting with six beds, the unit expanded to nine beds in 1975 and in 1981 to twelve beds. During the same period, the eight-bed progressive care unit was opened and in early 1983 expanded to twelve beds.

MCH, formerly known as Variety Children's Hospital, first entered the Regionalized Perinatal Program in 1977 but withdrew after a year and rejoined in 1980. Over the past few years, formal arrangements with four area hospitals (North Shore, Mercy, Baptist, and South Miami) have been negotiated to develop and expand their nurseries. Frequent lectures and conferences at area hosptials and in the Caribbean demonstrate MCH's firm commitment to outreach education. A two-week Neonatal Intensive Care Course has been given for nurses from both MCH and the outlying area three or four times each year for several years.



Fig. 1. — Broward General Medical Center in Fort Lauderdale.

Currently composed of five full-time neonatologists, the Division of Neonatology provides care to approximately 300 critically ill infants each year. Support is readily available within the hospital from consultants in virtually all pediatric and ancillary specialties. Developmental follow-up is provided through the outpatient department and the Division of Pediatric Neurology. The NICU is an integral part of the approved residency training program in pediatrics at MCH. Clinical research protocols are being developed particularly in the areas of sudden infant death syndrome and epidemiology. A Neonatal Parent Support Group, a nonprofit organization developed and maintained by parents who have had infants in the NICU, provides continuing emotional support for parents of infants currently hospitalized. The group organizes an annual reunion party to which all NICU "graduates" are invited.

Component Directors:

Neonatology:	Dr. Carol B. Hersh	(305) 666-6511 Ext. 401
Development:	Dr. Louise Cason	(305) 666-6511 Ext. 588

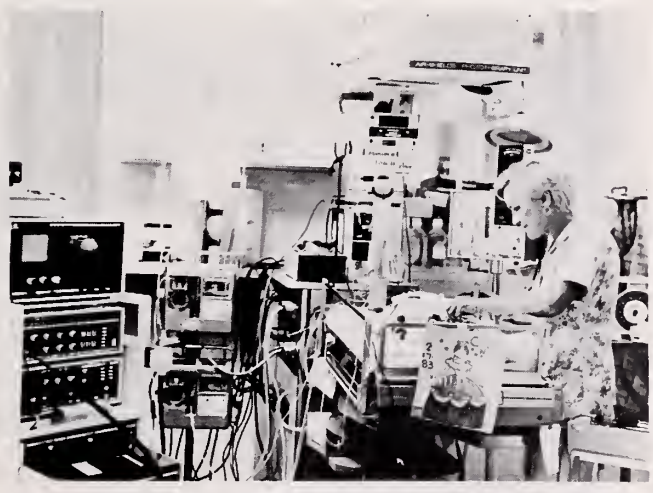


Fig. 2. —Extensive neonatal support being provided at Miami Children's Hospital.

Dade County, University of Miami-Jackson Memorial Medical Center, Miami: The neonatal center at the University of Miami was another of the five original centers in the inception of the Regional Intensive Care Program in 1973-74. At that time, there were 5500 deliveries, 30 special care neonatal beds with eight dedicated to intensive care. There were three neonatologists and two neonatal fellows in training and between 600-700 admissions to the special care center.

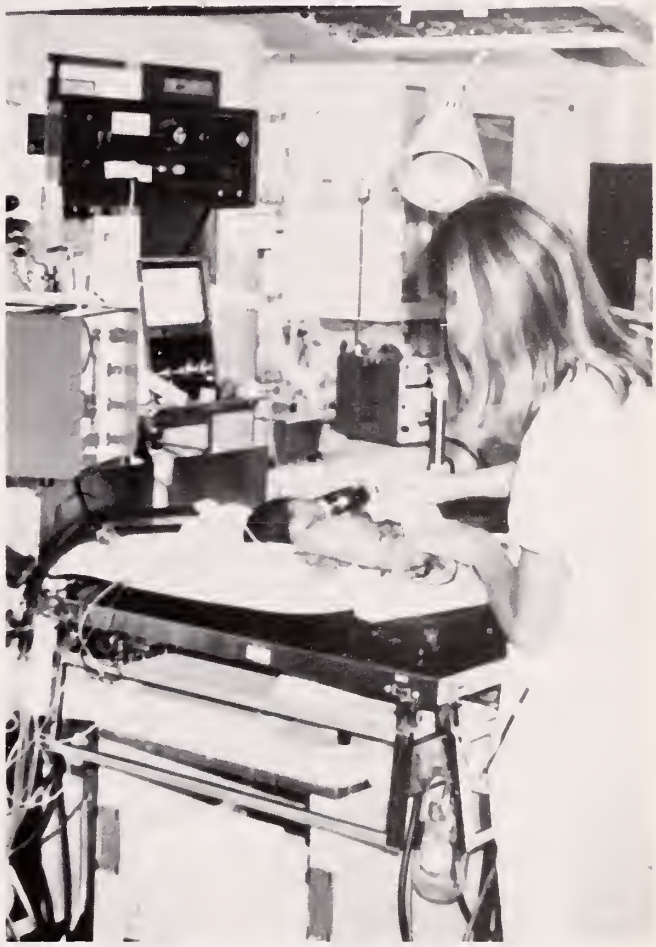


Fig. 3. - Neonatal Intensive Care Center at the University of Miami/Jackson Memorial Medical Center.

In 1983 over 10,000 deliveries are projected. The special care center has grown to 70 beds including 18 for intensive care, 23 for intermediate care, 11 for stepdown and 18 for progressive care. Of over 1500 annual admissions to the center the overwhelming majority are inborn. Because of the markedly increased birth rate and the referral of high risk mothers to this center, there is rarely room for outborn transfers. There are seven full-time neonatologists and five neonatal clinical attending physicians. Five clinical fellows and three research fellows are accepted into the training program each year. Several special laboratories have been established to specifically support

the neonatal service. These include pulmonary function, coagulation, blood gas, and research animal. There is also ongoing involvement of the neonatal team in a sudden infant death research program. Federal research programs are funded for investigation into the possible acceleration of lung maturation, cause and treatment of chronic lung disease and consequences and treatment of severe perinatal asphyxia.

The obstetric program operates a large high-risk obstetric clinic and several perinatologists have been added to the full-time faculty. A perinatology fellowship program has been developed and cooperative research, training and service programs with neonatology are ongoing.

The developmental evaluation program has enrolled over 3000 infants and is expected to perform approximately 2500 evaluations in the 1982-83 fiscal year. Research regarding the outcome of specific subgroups at greatest risk is in progress and has resulted in many abstracts as well as national and international presentations.

Perinatal postgraduate courses for physicians are held yearly and intensive care courses in neonatal and obstetric nursing care are held semiannually. In addition, tutorials for physicians, nurses and respiratory therapists are continuous. Establishment of a separate and distinct neonatal respiratory therapy team as well as addition of neonatal ICU technicians has enabled improved care for patients.

In late 1983 a new maternal-child tower will open and provide larger and more modern facilities for neonatal intensive care and all obstetrics. The labor rooms and the neonatal ICU will be in immediate proximity providing rapid access to infants in need of emergent care. In spite of the increased number and more complex nature of patients admitted to this center, both mortality and morbidity have improved as reflected in statewide statistics.

Component Directors:

Obstetrics:	Dr. MaryJo O'Sullivan	(305) 325-6950
Neonatology:	Dr. Eduardo Bancalari	(305) 325-6380
Development:	Dr. Arthur Maislen	(305) 547-6660

Duval County, University Hospital of Jacksonville, Jacksonville: University Hospital of Jacksonville was another of the original five planning and organizing centers which met during 1973-74. Since that time the number of high-risk maternity and neonatal patients receiving care at the University's Regional Center has increased annually to the current rate of 360 obstetric and 499 neonates. In addition to inpatient newborn care, 256 infants were seen in the NICU follow-up clinics and/or received specialty services in the developmental follow-up component.

The Division of Neonatology participates in a variety of clinical research projects such as investigating the pharmacokinetics and efficacy of specific antibiotics and assessing objectively various clinical management strategies used in the Newborn Intensive Care Unit.

Of particular importance to the Regional Program is the development of specialized programs to expand and augment delivery of neonatal services. In July 1978 the Division of Neonatology initiated a city-wide neonatal program to provide a more comprehensive care system than could be accomplished within the Regional Center alone. This concept united three major in-city newborn services with the Regional Center. It has improved availability of critical care bed space by providing 24 accessible stepdown care beds within the sytem. It has fostered more efficient deployment of personnel, equipment and educational services. The Division of Neonatology has increased the number of attending neonatologists to six full-time physicians.

This center is developing multidisciplinary systems within neonatology to provide a wide range of professional services. Two full-time clinical nurse specialists conduct Florida's first Neonatal Critical Care Nurse Practitioner Program which is a formal post-basic course for experienced registered nurses to prepare them for clinical management roles in newborn intensive care. Nurses completing this course are eligible for A.R.N.P. certification. The division also employs eight neonatal physician's assistants who also help to provide comprehensive patient management. All personnel actively participate in the delivery of educational activities.

Seminars and courses cover advanced techniques and clinical management of high-risk newborns. They are designed as short-term, advanced level courses in patient management and include participants from all parts of the United States. An extensive physical renovation of the neonatal center is underway and will be completed at the end of 1983.

Component Directors:

Obstetrics:	Dr. Ernest Ferrell	(904) 350-6654 Ext. 6652
Neonatology:	Dr. Thomas Chiu	(904) 350-6654 Ext. 6639
Development:	Dr. Francis B. Buda	(904) 350-6654 Ext. 3691

Escambia County, Sacred Heart Hospital, Pensacola: The Sacred Heart Hospital-Regional Perinatal Intensive Care Center was another of the original five and one of the first community hospitals to participate. Since its designation as a Regional Center, it has served a total of over 4000 expectant mothers ranging from 21 in 1975 to 926 in 1982. Sick newborns admitted to the intensive care nursery ranged from 236 in 1973 to 581 in 1982. The Developmental Evaluation has assessed approximately 3000 infants. The staff evaluated 340 in 1974 and increased this number to 483

in 1982. The clinic meets weekly with approximately ten infants seen at each session. Absentees are contacted by phone or letter and scheduled for a future clinic. In March 1982 a satellite clinic was begun in Panama City and thus far approximately 100 children have been evaluated there.

An early intervention Infant Development Project funded by the Health and Rehabilitative Services' Developmental Services began in April 1981. It is staffed by three nurses, an occupational therapist and a physical therapist who prepare developmental care plans and are developing both a risk scale for predicting developmental delay as well as inpatient and after-discharge parent support groups. Their responsibility also includes improving relationships between referring hospitals and Sacred Heart Hospital and training nurses in intervention strategies.

An organization called Perinatal Support Services is active with this center. It is a federally funded project for prevention of both child abuse and neglect of biologically impaired infants. In September 1981, a Perinatal Continuing Education Program originally developed by the University of Virginia was initiated. It is a six-month program for doctors, nurses and support personnel at community hospitals within the 18 county Health Systems Agency District. It has been conducted at six community hospitals with 30 physicians and 125 nurses and support personnel participating.



Fig. 4a. — Sacred Heart Hospital in Pensacola.

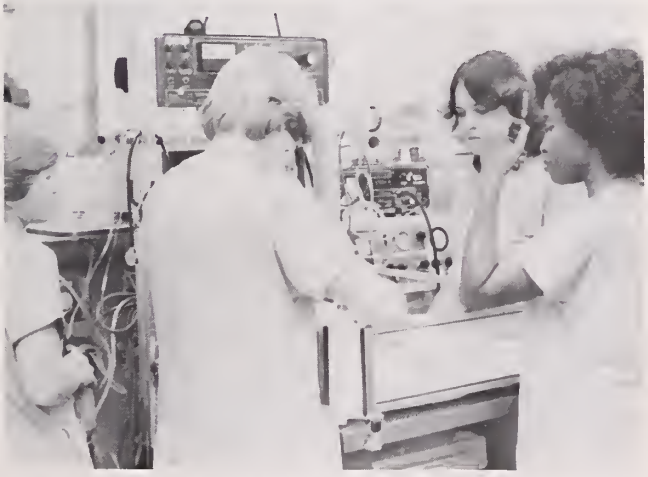


Fig. 4b. — Neonatal care team at work in Sacred Heart Hospital in Pensacola.



Fig. 4c. — Developmental evaluation in progress at Sacred Heart Hospital in Pensacola.

A social worker meets with all parents and prepares a psychosocial assessment of each family. She provides supportive counseling during the baby's hospital stay, assists the family with discharge plans and refers the family to community agencies for aid, when needed.

Sacred Heart Hospital's commitment to neonatal intensive care was visibly demonstrated by opening a new 6000 square foot ICN in September 1982. It provides the finest newborn care facilities with 18 intensive care, eight intermediate and five stepdown care beds. The full-time physician staff has grown from one to four neonatologists and one neonatal fellow.

Component Directors:

Obstetrics:	Dr. Gordon Couch	(904) 476-3696
Neonatology:	Dr. Edward R. Westmark	(904) 476-7851 Ext. 4070
Development:	Dr. Mercedes Picardi	(904) 478-1100

Hillsborough County, Tampa General Hospital - University of South Florida, Tampa: The Neonatal Section of the University of South Florida College of Medicine at Tampa General Hospital developed as one of the cornerstones of the new Pediatric Department in 1972 and since its early days has been utilized as a product evaluation center. A well-known instrument developed here is the "Dina-map" commonly used for noninvasive measurement of blood pressure. Other products tested include the Critikon $TcPO_2$ transcutaneous monitor, "Invivox Oxygen electrode" and the Siemen's 902C volume/pressure ventilator.



Fig. 5. — University of South Florida, Tampa General Hospital.

This center is one of the five founding members of the regionalized state Perinatal Program. During ensuing years there has been rapid growth of the maternal high-risk and developmental evaluation programs. The number of deliveries has increased from 3200 in 1974-75 to almost 4200 in 1982-83. The number of high-risk mothers has similiarly increased from 130 in 1977-78 to over 1000 in 1982-83. Neonatal admissions have remained relatively constant at between 500 and 600 per year but developmental assessments have shown almost an eight-fold increase with over 600 evaluations being done this year.

Research has reflected the varied interests of the staff such as nutritional studies, group B streptococci colonization of the mother and her offspring, biochemical properties of surfactant, assessment of gastric emptying, thyroid function in the very low birth weight infant, and fiberoptic bronchoscopy of the infant following long-term or repeated endotracheal intubation. These latter studies involve collaboration with other departments and are ongoing. Changing ethical standards of medical students and the influence of a "coach" on the parturient mother are examples of medical-sociologic research.

During the past decade, the program has expanded both within the hospital and throughout the community. An interim renovation will establish 14 step-down beds. The new Tampa General building program, funded in part by the Florida legislature, will enlarge the NICU by mid-1985 to a 42 bed high-risk and 20 bed progressive care center. Expansion within the community has led to a professional affiliation agreement with Sarasota Memorial Hospital, supervision of the neonatal service at St. Joseph's Hospital in Tampa and an informal affiliation with Lakeland General Hospital.

Several programs are currently being developed which include a neonatal and pediatric nutrition support team, an evaluation center for infants at risk for SIDS and an infant hearing screening program. A three-point land and air neonatal and pediatric transport and support team is being established.

In summary, the USF Section of Neonatology has developed during the past decade into an established regional center. Services in outreach education and medical care have been extended beyond the county borders. It has initiated links with both the medical and industrial community. Commitment to teaching and to research has led to peer recognition, collaboration and to the publication of numerous articles.

Component Directors:

Obstetrics:	Dr. James M. Ingram	(813) 974-2088
Neonatology:	Dr. John Curran	(813) 251-7420
Development:	Dr. Michael Cupoli	(813) 974-3323

Orange County, Orlando Regional Medical Center, Orlando: The Orlando Regional Medical Center's Neonatal Intensive Care Unit entered the Regionalized Perinatal Program in July 1975. It has 15 intensive care and ten intermediate care beds. Since its inception the Unit has cared for over 3000 infants. The majority of them have been from central Florida but a significant number have been transferred from distant parts of the state through the regional neonatal care system.

The Follow-Up Clinic also was established in 1975 and an average of 400 infants are evaluated each year. The Obstetric Clinic was established in October 1978 and through June 1982 approximately 600 women have been seen.

An important commitment of the Newborn Unit is to instruct physicians and ancillary medical personnel in outlying hospitals to recognize and stabilize sick infants until proper transfer to the Neonatal Unit can be made. For that purpose, an Educational Outreach Program has been established. It is composed of physicians, nurses, and respiratory therapists who visit community hospitals monthly and give lectures, slide presentations, and hold question and answer sessions on newborn care. Since May 1979 a total of 40 courses have been organized and presented at various hospitals from which neonates are referred.

Three new programs have been initiated at Orlando Regional Medical Center within the last few years dealing primarily with perinatal services. These include a Neonatal Nurse Clinician Training Program, Neonatal Hearing Screening Program and an Infant Stimulation Program. These are all separately funded but impact directly on the perinatal program.

Component Directors:

Obstetrics:	Dr. N. Donald Diebel	(904) 644-5371
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Development:	Dr. Charles Carter	(305) 656-7711

Pinellas County, All Children's/Bayfront Perinatal Center, St. Petersburg: The All Children's/Bayfront Perinatal Center at St. Petersburg was begun in 1976 with designation of All Children's Hospital as a neonatal referral unit. The obstetrical component was initiated in 1979 in accordance with the state's perinatal program. The number of infants admitted has increased from 190 in 1977 to more than 400 in 1982 and the number of mothers served in the obstetric component averages 200 high-risk pregnancies each year. Approximately 50% of these patients are from Pinellas County. Services are family oriented and provide teaching for obstetric, pediatric and family practice residents, nurses, and respiratory therapists as well as postgraduate training for physicians in neonatology. Current research is in the areas of maternal behavior and rotavirus surveillance. Outreach programs have been designated for both physicians and nurses and extend to hospitals along the west coast of central Florida. There is an ongoing annual perinatal conference and on request short practical courses in neonatology are available for practicing physicians in the community. Currently there is extensive renovation in the obstetric facilities at Bayfront Medical Center. At All Children's Hospital, construction on a new, 40 bed neonatal intensive care unit was to begin in July 1983.



Fig. 6. — Neonatal intensive care being provided at All Children's Hospital in St. Petersburg.

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Discussion • These nine perinatal tertiary care centers have developed a cooperative network that covers the entire state and occasionally parts of Georgia, Alabama, Central and South America and the Caribbean Islands. Despite the sophistication of this program, not everyone needing special perinatal care has access to it. The program continues to expand with a tenth center being recruited. Obstetrics and neonatal decentralization of low-risk deliveries has been attempted to free existing facilities for use by more critically needy patients. The use of stepdown care beds and level-two affiliations with ongoing consultative and outreach education programs have made the program more efficient. The development of infant stimulation programs and parent support groups through follow-up components is the next logical step in meeting the needs of this population. Mortality and morbidity have been reduced, but socioeconomic, emotional, financial and later intellectual problems are recognized. More extensive support programs are needed and these are in the developmental phases at all nine regional centers.

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Data base management system for Children's Medical Services Regional Perinatal Intensive Care Centers Program

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ABSTRACT: The State of Florida Children's Medical Services contracted with the Department of Pediatrics, University of Florida College of Medicine, to develop an integrated, comprehensive, computerized data collection and monitoring system for the Regional Perinatal Intensive Care Centers Program. Neonatal, obstetrical, developmental and fiscal components are included in the online data base management system. The system resulted from the need to assess the impact of the Regional Perinatal Intensive Care Center program on the incidence of perinatal mortality and morbidity. The perinatal data base contains information on more than 30,000 patients served since 1977. Analysis of survival data from the neonatal data base indicates that (1) infants with birthweights 500-750 grams had 18% survival; (2) 751-1000 grams 50% survival; (3) 1001-1500 grams 83% survival, and (4) greater than 1501 grams 94% survival. These neonatal survival statistics are examples of quantified statewide data base management which allows clinicians and program management specialists to make decisions based on current normative information.

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In 1975 a computerized neonatal data system was implemented by the Sacred Heart Hospital in Pensacola to collect data on newborns served in Florida's Neonatal Intensive Care Centers. The Department of Pediatrics at the University of Florida College of Medicine began in 1977 to provide data management and analysis for the developmental evaluation component. The need for an expanded data base management system to collect and correlate data from the three components (obstetrical, neonatal, and developmental evaluation) of the Regional Perinatal Intensive Care Centers Program became apparent. In 1979, Children's Medical Services contracted with the Department of Pediatrics to develop an integrated, comprehensive, online data base management system for the statewide program.

The Program's data base management system has four major goals. They are to evaluate the program effectiveness, track and evaluate the consequences of tertiary perinatal care on patients, establish a monitoring and quality control system for high risk perinatal care, and establish a monitoring and fiscal management system.

The system is designed as an online interactive system with visual computer terminals located at each of the nine regional centers and at the Children's Medical Services Program Office. Authorized personnel are afforded ready access to the data system for data entry and retrieval of information for patient and program management and monitoring purposes.

Mode of operation and services provided • The data base management system was developed to include online capabilities utilizing visual computer terminals. Hewlett-Packard computer terminals are

located at the Regional Perinatal Intensive Care Centers and interact through telephone modems with the Computing Center at the University of Florida College of Medicine. Each perinatal center routinely enters patient specific data from the four components (demographic, medical, developmental, and fiscal) into the data base for all patients receiving program services.

Data are entered from five sets of forms developed with program objectives in mind. Patient demographic forms provide information on each patient serviced. Obstetrical forms provide program service data, obstetrical medical/diagnostic information, and infant outcome data. Neonatal forms provide program service data and neonatal medical/diagnostic information. Developmental evaluation forms provide medical and developmental information. Fiscal forms provide hospital and physician charge data and transportation information. Data base management specialists provide training for data entry personnel at each center to maintain high quality data input.

Formats for monitoring reports including patient listings and periodic statistical analyses were developed for each of the four components. These summary reports and individual patient listings are generated at each center on a quarterly, semiannual, and annual basis. The summary reports include program statistics and fiscal data relating to hospital and physician services. Individual patient listings provide key data elements for each patient receiving services. Neonatal and obstetrical mortality data and developmental morbidity data for each center are analyzed and compared to statewide program data on a regular basis. Each perinatal center is provided copies of their statistical summaries and individual patient listings for each program component at that center. A statewide summary report is also sent to each center. These reports are utilized for ongoing program monitoring by Children's Medical Services district and state offices.

All patient records in the data system are deemed privileged and confidential and are not open for public review. These records are maintained in accordance with Health and Rehabilitative Services Confidentiality Requirements for Client Records (memo 15-2). For planning purposes, aggregate statewide cumulative data for the program are provided to the Florida legislature, Governor's office, and appropriate agencies coordinated with the Regional Perinatal Intensive Care Center Program. Additional data may be provided to appropriate agencies or groups for research or planning purposes with the approval of the Children's Medical Services program office.

From 1977 through December 1982 demographic and medical data have been compiled for 21,364 newborns who received neonatal intensive care services in a regional center. Developmental data have been collected for 5,239 children. Data for 8,516 high risk obstetrical patients have been collected since 1980. These combined records form an extensive statewide data base for analysis of the regional perinatal intensive care service delivery system.

Example of neonatal data base utilization • Neonatal survival data are of primary interest in analyzing perinatal health care services. The following neonatal analyses which have been performed illustrate the type of information which can be obtained from the data base system. Table 1 lists the number of infants who received neonatal intensive care since 1976, their mode of entry, and the incidence of major types of diagnoses and treatments. Seventy-five percent of admissions to the Florida Regional Perinatal Intensive Care Center Neonatal Component were infants with birthweights greater than 1500 grams. Infants with birthweights less than 1500 grams have higher percentages of problematic diagnosis and therapeutic interventions than those with heavier birthweights.

TABLE 1.—Regional Perinatal Centers Admission, Survival and Diagnosis Comparisons by Birthweights Less and Greater than 1500 g.

	BIRTHWEIGHT GROUPS		TOTAL
	500 g - 1500 g	1501>g	
# Admissions	5,441	15,593	21,364
% Admissions	25%	75%	100%
% Survival	67%	94%	87%
% Inborn Survival	67%	96%	88%
% Transported Survival	69%	91%	84%
% Inborn	60%	67%	55%
% White	36%	54%	53%
% Male	51%	51%	55%
% Respiratory Distress Syndrome	61%	34%	40%
% Bronchopulmonary Dysplasia	06%	01%	02%
Asphyxia	38%	17%	23%
% Nervous System Diagnosis	25%	11%	23%
% Congestive Heart Failure or Cardiovascular Disease	20%	11%	13%
% Congenital Anomalies	05%	11%	10%
% Assisted Ventilation	46%	21%	25%
% Continuous Distending Airway Pressure	41%	25%	29%
% Major Surgery	06%	04%	04%

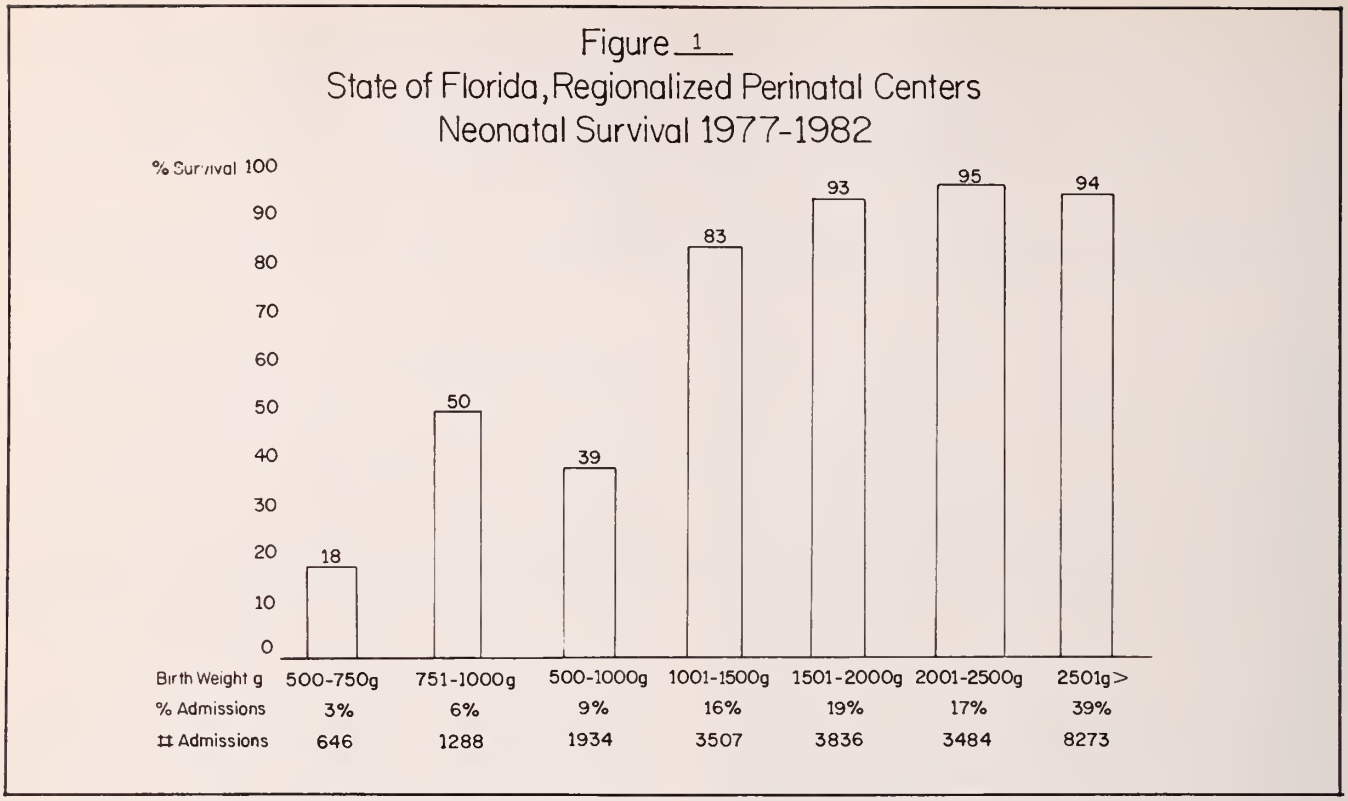


Fig. 1. — State of Florida, Regional Perinatal Centers, Neonatal Survival 1977-1982.

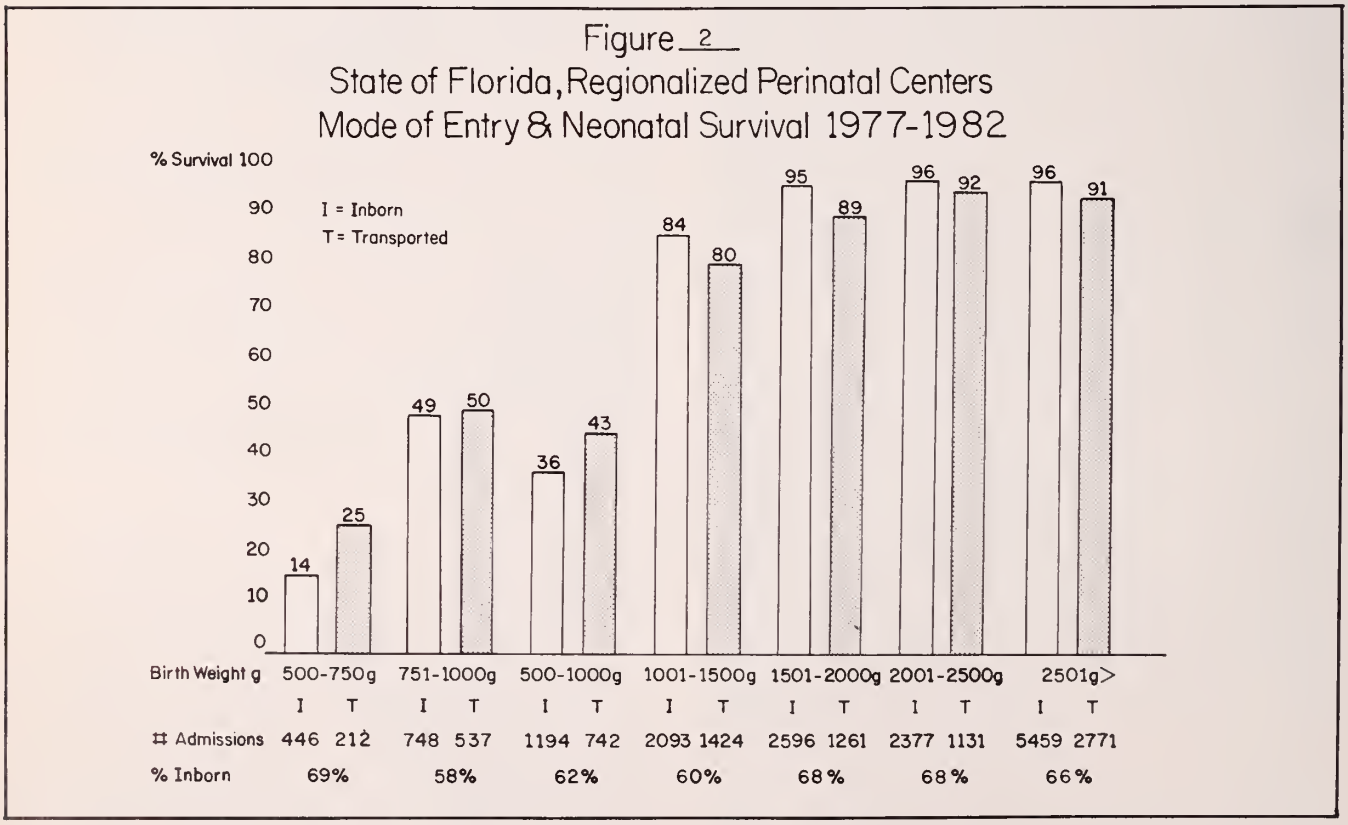


Fig. 2. — State of Florida, Regionalized Perinatal Centers mode of entry and neonatal survival 1977-1982.

Statewide neonatal survival data for the six year period 1977-1982 are presented in Figure 1. Ninety-four percent of the infants with birthweights greater than 1500 grams survived. This is in contrast to the low survival rates for infants with birthweights 1000 grams or below.

Figure 2 represents neonatal survival comparisons between inborns and transported infants by birthweight. The percentage of inborn infants receiving neonatal intensive care varies by birthweight from 58-69%. Those with birthweights greater than 1500 grams have similar survival percentages whether they are inborn or transported into the neonatal center. However, in the lowest birthweight group (500-750 grams) inborn infants had lower survival percentages than transported infants. This difference may be due to high mortality of these infants in the first few hours of life. Death in a referral hospital would not result in a transport and therefore would not be entered into the data base system. However, if it occurred in a perinatal center (inborn), then it would be included in the survival statistical analysis.

Summary • The Regional Perinatal Intensive Care Centers Program computerized data system is an integrated online data management system which includes neonatal, obstetrical, developmental, and fiscal components. Software necessary for data input and retrieval have been developed. A user's manual has been written to ensure proper utilization of the system and its output documents. University of Florida faculty provide technical assistance, consultation and training to the staff at each of the Centers regarding the system's operation, report generation and verification of data. The system generates quarterly, semiannual, and annual reports for each program component by Center. Reports are provided to each Center and to the Children's Medical Services program office at the district and state levels. Reports include patient's medical management, demographic information, and fiscal monitoring. Quarterly mortality and morbidity statistical reports for the perinatal components are generated from the data system. An annual data management report is provided to the Children's Medical Services program office regarding the scope of the data system. This report includes information on system utilization and operation as well as information on current and future development plans for software, entry forms, user's manual, and reporting documents. Built in security was devised with the development of the data system to ensure privacy of information for each patient.

Analysis of the data generated by the perinatal program has provided quantitative information needed to evaluate methods of perinatal care and many provide clues and direction in order to improve the quality of life for high risk mothers and for those infants who are premature and/or seriously ill.

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New strategies for preventing an old problem: low birthweight

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ABSTRACT: The low weight at birth of more than 60% of low birthweight infants (under 2500 grams) born in Florida can be prevented with early and adequate prenatal care, excellent nutrition management and food supplementation, attention to stress management, and teaching the patient the signs of premature labor. More attention needs to be given to family planning including sterilization for those women at risk for giving birth to low birthweight babies.

The birth of low birthweight (LBW) infants remains one of the most important health problems in the U.S. Even though neonatal intensive care has reduced mortality and morbidity, and obstetrical research and establishment of maternal-fetal medicine as a subspecialty in obstetrics-gynecology have improved high-risk maternity care, the primary prevention of LBW infants is a public health problem that few states have addressed effectively.

Scope of the problem • Florida has experienced very rapid population growth over the last two decades or more, much of it consisting of young people of reproductive age. While Florida has not been as seriously affected by the current recession as other states, there are many large pockets of both rural and urban unemployment and poverty.

Therefore, due to the state's booming growth even though the LBW rate has fallen slightly since 1975, the actual number of LBW infants has increased by almost 2000 (Table 1). Florida is justly proud of her fine regionalized system of perinatal-neonatal

Table 1.—Low Birth Weight Infants—Florida.

Year	Numbers of LBW Infants	Percentages of Total Births That Are Low Birth Weight
1975	8,538	8.1
1976	8,168	7.8
1977	8,752	7.9
1978	8,880	7.8
1979	9,405	7.8
1980	9,948	7.5
1981	10,303	7.4
1982	10,500	7.4

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care (under Children's Medical Services), but potentially sick babies are increasing much faster than the Regional Perinatal Intensive Care Centers (RPICC) are expanding to meet the need. Services provided by the RPICC cost $24.5 million in 1982-83 but an estimated $1.3 billion was spent by the state in 1982 on short-term, long-term and institutional care for citizens with problems related to disability incurred around the time of birth.[1]

Public health aspects of the LBW problem • Comprehensive, early prenatal care and seven or more prenatal visits have a strong, direct effect on decreasing the number of LBW births.[2,3] Yet in 1975 the March of Dimes — Birth Defects Foundation ranked Florida 37th of the 50 states in its ability to get women to start prenatal care in the first trimester. In 1982 the Department of Health and Rehabilitative Services estimated that there were 65,000 low income pregnant women in Florida but only 25,000 were getting comprehensive pregnancy care. The March of Dimes has documented nationally that if a women has 13-14 prenatal visits she has only a 2% chance of having a LBW baby. If she has no visits at all, she has greater than a 9% chance of a small baby.[1]

Some of the reasons for this poor showing on the part of the public health system are (1) deteriorating services from county health units due to inability of their service providers to keep up with the rapidly increasing numbers of low income clients, many county health units can no longer send public health nurses into homes, an important case-finding method in the past; (2) only a recent (1982) interest by the state in investing state monies in prenatal care. The state Improved Pregnancy Outcome Program was begun in 1982 in response to a sharp cut in federal funds which had supported many prenatal services that existed in the past.

Reasons for sparse participation in the care of these women by the private sector of medicine are: (1) Poor Medicaid coverage. Less than one half of the going rate for obstetrical care is paid to doctors by Medicaid and less than one third of poor women are covered by Florida's Medicaid program. (2) Many physicians think that care of low income people incurs higher malpractice risk, although this concern is not borne out by the facts. Nonetheless, since obstetricians pay the highest premiums, they are reluctant to extend themselves. (3) Lack of interest by most physicians in volunteering free care to charity patients — an old concept apparently spoiled by the Medicare-Medicaid era.

Because of these problems, there are a number of counties where poor women have no care available through the county health unit or from private vendors. A few of these counties are served by itinerant teams from the medical schools but in others the women receive no prenatal care and show up at the nearest hospital when they are ready to deliver or they are cared for by lay midwives and deliver at home. None of these options present the best scenario for preventing LBW births.

Definitions • A low birthweight baby is any baby under 5½ pounds or 2500 grams. Preterm means delivery before 37 weeks. Intrauterine growth retardation (IUGR) refers to a baby weighing under 2500 grams but born after 37 weeks. The term premature is no longer used.

Almost 90% of LBW babies in the USA are preterm births, whereas in developing countries with much higher LBW rates over one half of the LBW babies are IUGR.[4]

Table 2.—Attributable Risks for Preterm Delivery.

Type of Risk	Percent
Low socioeconomic status	40-60
Repetitive prematurity (and abortions)	18
Unwanted pregnancies	14
Smoking	4-14
Multiple pregnancy	10
Placenta previa and abruptio placentae	10
Maternal illness (hypertension, cardiac, renal, pulmonary, etc.)	9
Fetal malformations	6
Iatrogenic	3

Causes of LBW infants • Table 2 lists the most common causes of LBW infants ranked in order of decreasing risk with the highest risk disorders being at the top.[5]

Leading the list is low socioeconomic status. Short stature, nonwhite, unmarried women with low educational attainmnet are most likely to produce LBW infants.[5] All the factors are closely related to socioeconomic status. The present recession has thrown many more into this general pool destined to produce most of the bad outcomes of pregnancy. It is interesting to note that increases in poor pregnancy outcomes are common in times of economic recession and also in the offspring of people born during those times when they reproduce.[3]

Poor nutrition is though to be one of the prime factors leading to poor pregnancy outcomes in economically poor women. Many are malnourished and in need of nutritional counseling and food supplementation when pregnancy occurs. Folic acid and vitamin B_6 deficiences are common in adult low income pregnant women and vitamins A, B, C and folic acid are needed by pregnant teenagers.[6,7] Unfortunately the first and second trimesters often go

by in these people without benefit of either food or vitamin supplementation because of either failure to enter or late entry into the prenatal care system.

People out of work or otherwise economically depressed are more likely to be heavy smokers and heavy drinkers of alcohol and coffee (often all three together) and this, added to their general malnutrition, can have disastrous consequences for the fetus. Smoking itself, with the associated high intake of nicotine, carbon monoxide and cyanide, is one of the most serious preventable factors. In addition to preterm birth, smoking is an important factor in IUGR, spontaneous abortion, stillbirth and neonatal death.[5]

Teenage pregnancy is lumped in Table 2 under the heading of unwanted pregnancy. Teenagers contribute heavily to LBW statistics because of anxiety associated with unwanted pregnancy, nutritional stresses due to pregnancy plus rapid body growth and smoking and alcoholism, both increasing in teenage women. Since February 1982 when the federal government announced its intention to institute the "squeal rule" (even though it has not yet come to pass), it appears that the number of teenagers coming to Florida family planning clinics has dropped off significantly.[8] Whether this increases the numbers of teenage pregnancies in Florida will be answered in the 1982-1983 vital statistics reports.

Stress plays a larger part than once was appreciated in unwanted pregnancies resulting in bad outcomes. Studies of psychosocial stress show clearly that women with such stresses are the heaviest contributors to the LBW pool. "Life event" or "life stress" inventories have been very helpful additions to the prenatal history, especially among low income patients, and help ferret out stresses that would not be brought out in routine history taking. Such inventories seek stresses such as unwanted pregnancy, recent death of family member, worry over child care, unemployment (woman or husband), and split with boyfriend. Acute stresses have also been found to acutely precipitate preterm labor.[9]

Strategies for prevention of LBW births • Most LBW babies could have been born at normal, healthy weights if current knowledge had been put into play. The remainder of this discussion deals with practical office interventions for patients who fall into the top four (most frequent) categories of attributable risks for preterm delivery: low socioeconomic status, repetitive prematurity, unwanted pregnancies and smoking. Since most of these risks are intertwined (for instance, the woman who is poor, smokes 2½ packs a day, gave birth to a 2100 gram baby four months ago, now is pregnant again and not pleased about it), specific interventions related to these risks will be presented.

Nutrition: Nutrition interventions are some of the easiest to implement since all counties now participate in the WIC program, the USDA's Food Supplement Program for Pregnant Women, Infants and Children. If a private or public health physician judges one of his low income pregnant patients to be at nutritional risk, she can be referred to the local WIC program office, usually in the county public health unit. The WIC nutritionist takes a diet history and then prescribes specific food supplements (such as eggs, milk, cheese, cereal) which are redeemed with food-specific vouchers at the grocery store. It is important to remember that WIC is a supplement to the regular diet, therefore, a poor woman may receive food stamps which supply her diet staples and WIC foods as a pregnancy supplement to her regular diet. The WIC program has been of great benefit to low income pregnant women with a reduction of LBW infants directly related to the length of time the woman was on the program, thus underlining the importance of early prenatal care for the effective use of this intervention (Table 3).[10]

Iron and multivitamin supplements, while of no proven benefit in well-nourished women, still are used routinely in the care of low income women until adequate data can be obtained as to the wisdom of this procedure.[11]

Stress: Women who make high scores on life stress inventories need very special attention. They need to be seen at least weekly until the stress is resolved. If the physician or nurse-midwife cannot schedule the time necessary for such counseling, social workers or psychologists may be helpful. Lack of sensitivity and attention to this problem has been the biggest defect in our prenatal care system and one of the biggest contributors to preterm births. The physician cannot personally do much about a person's socioeconomic status (beyond extending her credit), but the physician can help women deal with life stresses by making time for sensitive, kindly counseling.

Smoking: Even poorly educated women have heard of, and are familiar with, the terms nicotine, cyanide and carbon monoxide, all words with bad connotations. We have found that using these terms in a frank discussion of fetal growth retardation, mental retardation, stillbirth and other known bad outcomes caused by cigarette smoking, results in a high compliance rate in the reduction or abandonment of smoking at least while carrying the pregnancy.

Table 3.—PREVENTION OF PRETERM DELIVERY.

Points	Socioeconomic Status	Past History	Daily Habits	Current Pregnancy
1	2 children at home Low socioeconomic	1 abortion; Less than 1 year since last birth	Works outside home	Unusual fatigue
2	Younger than 20 years Older than 40 years Single parent	2 abortions	More than 10 cigarettes per day	Less than 30 kg. weight gain by 32 weeks gestation Albuminuria Hypertension Bacteriuria
3	Very low socioeconomic status Shorter than 150 cm. Lighter than 45 kg.	3 abortions	Heavy work Long, tiring trip	Breech at 32 weeks Weight loss of 2 kg Head engaged Febrile illness
4	Younger than 18 years	Pyelonephritis		Bleeding after 12 weeks gestation Effacement Dilation Uterine irritability
5		Uterine anomaly DES exposure 2nd trimester abortion		Placenta previa Polyhdramnios
10		Premature delivery Repeated 2nd trimester abortion		Twins Abdominal surgery

Scoring System: 0 - 5 points = low risk (for preterm delivery)
6 - 9 points = medium risk
≥ - 10 = high risk

Unwanted pregnancy: Rovinsky reported a decade ago that within one year after institution of liberalized abortion laws by the U.S. Supreme Court, the numbers of high risk (including LBW) births in New York City fell precipitiously.[12]

Teenage women for the first year and a half after they give birth to their first child are the most likely women to get pregnant. This alarming statistic has led some groups to focus most of their family-planning efforts on recently-pregnant teens with excellent results.[1] The methods used are simply frequent (monthly) contact with the teen by a caring person (nurse, social worker), making sure she is tolerating her chosen family planning method and continuing to use it. If she is dissatisfied, they help her find another method. Some groups have involved the male sexual partner in these choices also, with success. The same "targeting" of family planning resources is being done in some states for women who have given birth to LBW infants. If only the above two groups of women could be provided with effective family planning, our LBW rates would quickly be reduced.

Additionally, many low income women do not have access to sterilization services (either postpartum or interval) due to funding problems in states like Florida. Sterilization for these women, who desperately desire it, costs only a fraction of the cost of another pregnancy and child care to a state, even if the pregnancy is normal.[1]

Teenage pregnancy: Teenage pregnancy, while not epidemic in Florida, contributes more than its share of LBW babies. Easy access to free or low cost pregnancy testing is an excellent way (since the majority of tests are negative) to get sexually active teens interested in a family planning method when the health provider has their undivided attention.[13]

The Teenage Pregnancy Team (TAPT) at the University of Florida College of Medicine has had a very effective teen pregnancy program in Alachua

County since 1978. The program is a cooperative one between the Department of Obstetrics and Gynecology and the Alachua County School Board's ACCEPT (Alachua County Continuing Education for Pregnant Teens) program. The TAPT team consists of a social worker, nutritionist, nurse practitioner, and child development specialist. A doctor does the initial history and physical and risking but then is not involved again until birth unless the woman is of high medical risk. The pregnant teen sees the same people at each visit and can page or phone them any hour, any day, due to a special communications system.

This program has been successful, with most of the teens remaining in school, with half the number of LBW infants (5%) and cesarean sections as a teen control group. Most importantly only 7% of the TAPT teens compared to 37% of the control group got pregnant the first year after delivery. Individualized or team care to teens pays great dividends.

Table 4.—Education.

Patient Education: (At first visit if medium or high risk)

1. Self-detection of painless contraction by palpation.
2. Report immediately if:
 a. Uterine contractions are in a regular pattern, with or without pain, occurring for one hour.
 b. Dull low backache, pressure, or pain.
 c. Intermittent lower abdominal or thigh pain.
 d. Intestinal "cramping" with or without diarrhea or indigestion.
 e. Change in vaginal discharge (bleeding or increased mucus).

Staff Education.

1. Medium or high risk patients should be seen weekly and have a vaginal exam by the same person.
2. Respond promptly to patient complaints of any of the subtle preterm labor signs or symptoms by doing pelvic exam and if cervical changes suspected, external monitoring of labor for 1-2 hours to assess uterine activity.
3. Liberal and early admission for observation, 1 to 3 hours, even if patient reports a *mild* increase in uterine activity.
4. Aggressive use of tocolytic drugs to stop labor.
5. Awareness of contraindications to tocolytic drugs, including:
 a. Premature rupture of membranes.
 b. Gestational age of more than 34 weeks.
 c. Cervix more than 4 cm. dilated.
 d. Dead fetus.
 e. Congenital anomaly incompatible with life.
 f. Severe hemorrhage.
 g. Active cardiovascular disease.

Prevention and early detection of preterm labor • Dr. Robert Creasy and colleagues in California have developed a method of patient and staff education which has reduced the preterm birth rate in his clinics in San Francisco from 7.0% to 3.8%.[14]

His definition of preterm labor is "regular uterine contractions together with progressive changes in cervical status or a cervix more than 50% effaced and/or more than 1 cm. dilated."[14]

His scoring system is calculated at the first prenatal visit and updated at 26-28 weeks of gestation (Table 3).[15] His patient and staff education protocols are in Table 4.[14]

We will introduce these protocols and the scoring systems into Florida's public health maternity clinics by way of statewide inservices over the next year and by doing so alert the health care professionals to the signs and symptoms of preterm labor. Women found to be high-risk candidates for perterm labor will be given special care and referred immediately to the RPICC system if labor threatens. This, of course, may put added strains on the obstetrical branch of the RPICC but, it as effective as the program has been in California, will start noticeably reducing the strains on the neonatal branch of the system within a year or two.

Team care: Most of the previously discussed suggestions for special plans to prevent the birth of LBW babies are best implemented with team care. It is difficult for one physican or nurse-midwife to deal alone with the complex patterns of nutrition and life stress. Time and specialized counseling skills are the paramount elements needed to get excellent results. All members of the team should be selected to get people with a driving interest in this problem and great empathy for families with this problem or potential problem.

Conclusion • The LBW infant problem is preventable in most of its aspects. Both Florida's and the nation's infant mortality rates could be brought down rapidly with minimal increases in cost if attention was paid to the basic elements of care. A scenario for achieving this in Florida appears in the State Plan for Maternity Care for Low Income Women published by HRS.[1] The state's efforts fit into a current national campaign mounted by the March of Dimes and American College of Obstetricians and Gynecologists called "Healthy Mothers — Healthy Babies."[16]

The magnitude of this serious health problem and the promise of excellent outcomes based on the application of both well known and newly-discovered methods of health care call for an immediate push by both private and public health care interests to bring this level of care to all Floridians.

References

1 Maternity Care for Low Income Pregnant Women Florida State Plan. Department of Health and Rehabilitative Services, 1983.

2. Breart, G.; Goujard, J.; Blondel, B.; Maitlard, F.; Chavigny, C.; Sureau, C., and Roumeau-Rouquette, C.: Comparison of Two Policies of Ante-natal Supervision of Prevention of Prematurity, Int J. Epidemiol 10:241, 1981.

3. Reed, D., and Stanley, F.: Epidemiology of Prematurity. Urban and Schwarzenberg. Baltimore-Munich, 1977.

4. Villar, J., and Belizan, J.: Relative Contribution of Prematurity and Fetal Growth Retardation to Low Birth Weight in Developing and Developed Societies, Am J. Obstet Gynecol. 143.793, 1982.

5. Johnson, J , and Dubin, N : Prevention of Preterm Labor, Clin Obstet. Gynecol. 23.51, 1980.

6. Bailey, L.; Mahan, C., and Dimperio, D Folacin and Iron Status in Low-Income Pregnant Adolescents and Mature Women, Am. J. Clin. Nutr. 33 1977, 1980.

7. Schuster, K ; Bailey, L., and Mahan, C Vitamin B_6 Status of Low Income Adolescents and Adult Pregnant Women and Condition of Their Infants at Birth, Am. J Clin Nutr. 34.1731, 1981

8 Barber, Donna Personal communication.

9 Newton, R ; Webster, P ; Binu, P ; Maskrey, N., and Phillips, A . Psychosocial Stress in Pregnancy and Its Relation to Onset of Premature Labour, Brit Med J. 2 411, 1979

10. Fleshood, L.. Tennessee Department of Health Reports, 1979

11 Hemminki, E Effects of Routine Haematinic and Vitamin Administration in Pregnancy, a chapter in Enkin, M , and Chalmers, I Effectiveness and Satisfaction in Antenatal Care Lippincott, Philadelphia, 1982.

12. Rovinsky, J.. Impact of Permissive Abortion Statute on Community Health Care, Obstet. Gynecol 41:781, 1973.

13. Wallace, H., Weeks, J., and Medina, A Services for Pregnant Teenagers in Large Cities of United States, 1970-1980, JAMA 248:2270, 1982.

14. Herron, M , Katz, M., and Creasy, R Evaluation of Preterm Birth Prevention Program Preliminary Report, Obstet. Gynecol 59 452, 1982

15. Creasy, R., Gummer, B., and Liggins, G.. System for Predicting Spontaneous Preterm Birth, Obstet Gynecol 55.692, 1980.

16. ACOG Newsletter, 25:1, Nov 1981

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Minimizing risk of repeated pregnancy loss

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ABSTRACT: Patients who have had previous pregnancy loss are at higher risk of poor outcome compared to those who have had an uncomplicated pregnancy. In order to reduce this risk, systematic prepregnancy counseling and intensive prenatal surveillance should be encouraged. At the University of Florida a special Prepregnancy Evaluation Clinic has been established to meet this need. Outlined here are some of the approaches used in minimizing the risk of premature labor which is the major problem of contemporary obstetrics.

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Family planning capabilities, career opportunities for women, and postponement of childbearing years have contributed to the enhanced expectations of obstetric and neonatal care. Today's patient is more informed and more aware of the reasons for pregnancy loss and is unsatisfied with a physician's advice to simply "try again." Patients with poor reproductive history want to know what, if anything, can be done to prevent a subsequent pregnancy loss.

Since it is known that couples with two or more unsuccessful pregnancies are at increased risk for spontaneous abortion and premature delivery, a growing area of interest in the field of maternal-fetal medicine is prepregnancy evaluation.

The most ambitious goal of prepregnancy evaluation is prevention of premature delivery.

Premature delivery • An infant born before 37 weeks gestation or weighing less than 2500 grams at birth is by definition premature. Although only 12% of the infants born at Shands Teaching Hospital from 1979-1981 were in this group, they accounted for 80% of all perinatal mortality. Experience in other obstetrical services parallels this. Over the past ten years the overall survival for all low birthweight groups has improved significantly with the availability of perinatal care and advances in neonatal intensive care. In spite of significant advances, it is clear that prevention of premature delivery will be a more cost effective solution to the problem. Several factors, both demographic and medical, have been associated with increased risk of premature delivery (Fig. 1). At present, however, half of premature labors are of unknown etiology while 30% are associated with premature rupture of membranes.

Age < 15
Age > 35
Previous Obstetric History
- Habitual abortion
- Stillborn
- Premature
- Neonatal death

Low Socioeconomic Level
Maternal Smoking
Narcotic Use
Low Prepregnancy Weight
No Prenatal Care
Multiple Pregnancy
Vaginal Bleeding 1st and 2nd Trimester
PROM
Acute Pyelonephritis
Placenta Previa
Low Weight Gain

Fig. 1.—Factors Associated with Premature Labor.

Using scoring systems both Creasy[1] and Fedrick[2] have attempted to improve identification of pregnancies at high risk for prematurity with success rates of 6-31% and 9% for primigravidas and 58-77% and 25% in multiparas respectively. Once identified this high-risk group of patients needs to be followed carefully for signs of premature labor or passive cervical dilation in order to institute measures that have been successful in prolonging gestation. For example, Laursen et al[3] have shown that in multiple gestation bed rest will prolong gestation, increase birthweights and reduce perinatal mortality. Creasy and coworkers[4] have shown that teaching patients self detection of early labor coupled with frequent prenatal visits and early use of tocolytic agents have reduced the prematurity rate in the high-risk group from 6.75% to 2.4%. Other centers are now using similar protocols to determine if this initial success can be duplicated. At the University of Florida, using the same risk scoring system, the technique of focused relaxation is being evaluated as a tool for preventing premature delivery.

When labor starts prematurely, an FDA approved tocolytic agent is now available that has been shown to be successful in controlling premature labor. Prospective multicenter studies in the United States have shown significant reduction in respiratory distress syndrome and neonatal death when ritodrine hydrochloride was used. Infants in the study group also were more likely to achieve a birthweight over 2500 grams and longer gestation.[5] The drug is administered initially through intravenous route until contractions are stopped for 12 hours then oral medication is utilized until maturity. Because of its potential side effects and a few reported cases of maternal mortality,[6,7] careful patient selection and monitoring must be followed. Patients with heart disease, hyperthyroidism and obstetric complications where prolongation of pregnancy is contraindicated (abruptio placentae, severe preeclampsia) are not candidates for tocolysis. Patients should be monitored for the early signs of such maternal complications as pulmonary edema, hypotension, myocardial ischemia, cardiac arrhythmia, and hyperglycemia in order to avoid serious sequelae.

If tocolysis fails, effort should be made to transfer the patient in premature labor to a facility capable of immediate neonatal resuscitation and intensive care. The outcome in infants < 1250 grams is significantly improved if they are delivered in a tertiary care facility. If this is not possible, immediate transfer of the neonate is indicated.[8]

Controversy still exists in the specific areas of corticosteroid use to hasten pulmonary maturity, management of premature rupture of membranes and method of delivery. Until more definitive data become available it will be necessary to individualize treatment. At this time at the University of Florida, corticosteroids are not used routinely when premature delivery is anticipated. Our experience without the use of steroids is comparable to that of other centers who do use steroids. Because of the still unanswered question of long term effects, we prefer this course of action. For premature rupture of membranes we generally follow the management protocol in Figure 2 which was developed based on our center's experience plus a review of the literature.

When delivery is inevitable, is cesarean section indicated for all premature infants? Cesarean section for the premature breech has gained wide acceptance in the United States although several large retrospective studies have failed to show a clear advantage to this practice.[9,12] Duenholter[13] in a retrospective paired controlled study has shown that the abdominal route was the preferable route of delivery for the low birthweight breech fetus. Long term followup[14] has shown considerable increase in developmental and neurological problems associated with vaginal delivery in the premature breech.

For the 501-1000 gram infant in cephalic presentation, Bowes[15] showed improved survival rate with cesarean section. A recent review of our six year data in infants weighing 750 to 1500 grams[16] did not show statistically significant difference in survival or long term outcome (measured by developmental quotient) whether delivery was vaginal or abdominal route. Until more data become available, weigh the potential benefit to the fetus against the known increase in maternal mortality associated with cesarean section (10 × for cesarean section vs vaginal delivery).

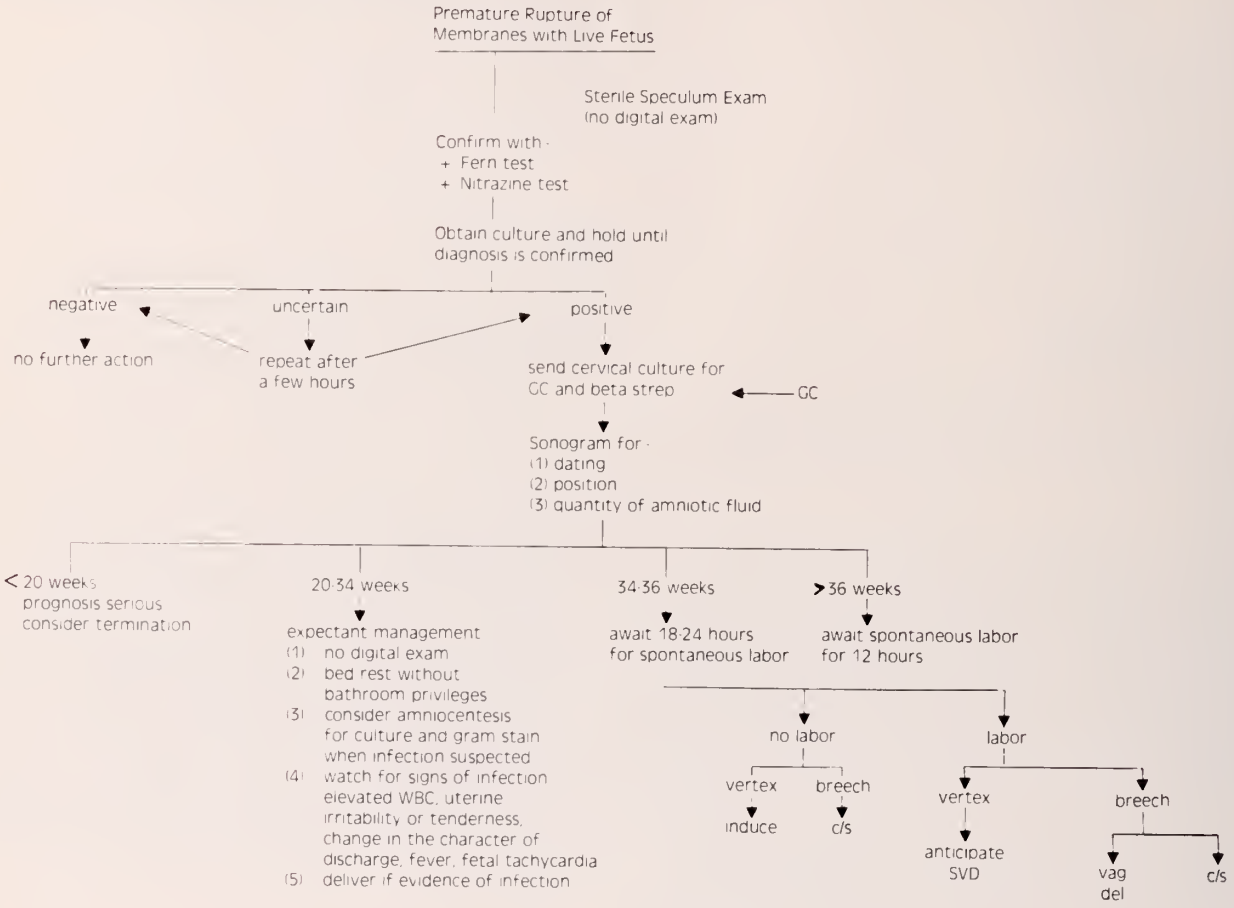


Fig. 2.—Management of PROM.

Incompetent cervix • The entity called incompetent cervix has been associated with repeated midtrimester pregnancy loss, history of cervical surgery such as D&C and cone biopsy, in utero exposure to diethyl stilbestrol, cervical laceration and very short labor. Incompetent cervix could account for as many as 1/54[17] to as few as 1/1842[18] cases of pregnancy wastage. The diagnosis is usually based on evidence of passive dilation and effacement of the cervix leading to immature delivery with normal fetus. Passive dilation may or may not be preceded by such nonspecific complaints as low back discomfort, increased vaginal discharge and urinary frequency without evidence of infection. Diagnostic tests aimed at confirming the clinical impression of cervical incompetence are not always confirmatory. If, in the nonpregnant patient, a #8 Hegar dilator can be inserted easily into the internal os the diagnosis is made. Hysterosalpingogram indicating loss of cervico-uterine angle and internal os diameter greater than 8 mm are the criteria used by some. No tests are available for diagnosis during pregnancy therefore frequent pelvic examination is needed to detect early changes. Cervical dilation, effacement, or ballooning of the lower segment will be indicative of incompetent cervix. Attempts to make the diagnosis by ultrasound have been hampered by difficulty defining where the cervix ends and the lower uterine segment begins as well as by the possible distortion or displacement produced by bladder distention.

When indicated, a cerclage procedure is performed after 14 weeks gestation. Higher success rates are reported if the procedure is done electively as opposed to when the cervix had dilated and ef-

faced (78% success vs 53% for McDonald cerclage).[19] In experienced hands, the procedure is easy to perform with minimal immediate postoperative problems. Delayed complications of severe infection, cervical laceration, cervical stenosis requiring cesarean section and failure of cerclage to prolong gestation must be discussed with the patient and considered before the procedure is recommended. Our protocol of management is shown in Figure 3.

I. Diagnosis considered before pregnancy.
 1. Careful history and physical examination
 2. Contraceptive advice during workup
 3. Hegars test
 4 Hysterosalpingogram
II. During pregnancy
 1. Diagnosis made before pregnancy
 a. Early prenatal care
 b. Ultrasound for dating and viability
 c. Cerclage at 14-16 weeks
 2. Diagnosis being considered
 a. Frequent pelvic exams
 b. Ultrasound for dating and viability
 c. Cerclage when diagnosis is made (but not after 28 weeks)
 3. After cerclage
 a. Pelvic exam every 2-3 weeks
 b. Bed rest - extent depends on cervical findings
 c. Tocolysis if premature labor
 d. Cut sutures at 37 weeks or if ROM or labor

Fig. 3. Incompetent cervix—management protocol.

Recurrent abortion • Workup should be considered after two or three spontaneous abortions and should include careful review of history and previous records, and complete physical examination. Laboratory tests including endometrial biopsy or hormone evaluation for luteal phase defect, chromosome analysis of the couple, hysterosalpingogram, screening for thyroid disease and collagen vascular disease should be considered. Contraception should be used until the evaluation is completed. In couples where specific etiology cannot be found, cervical culture for mycoplasma and immunologic studies must be considered.

Conclusion • Discussion of pregnancy loss due to stillbirth at term and specific medical problems such as hypertension, diabetes mellitus, Rh incompatability and third trimester bleeding will be found in review articles in the obstetric literature.

Most important is the need for careful evaluation of the patient with pregnancy loss, preferably before another pregnancy is undertaken. At the University of Florida a special clinic, the Prepregnancy Evaluation Clinic, is devoted to the evaluation of such patients. After the workup, some couples decide against another pregnancy while others have benefited from treatment before another attempt. All new information is shared with the couple and their referring physician as well as suggestions for management of the subsequent pregnancy. Familiarity with the available diagnostic and therapeutic modalities available to the couple as well as their benefits, risks and limitations help the prospective parent with their decision to proceed with a pregnancy.

Through prepregnancy evaluation, early intervention may reduce the risk of another pregnancy loss.

References

1. Creasy, R.K.; Gummer, B.A., and Liggins, G.C.: System for Predicting Spontaneous Preterm Birth, Obstet. Gynecol. 55:692-695, 1980.
2. Fedrick, J.: Antenatal Identification of Women at High Risk of Spontaneous Preterm Birth, Br. J. Obstet. Gynecol. 83:351-354, 1976.
3. Laursen, B.: Twin Pregnancy: Value of Prophylactic Rest in Bed and Risk Involved, Acta. Obstet. Gynecol. Scand., 52:367, 1973.
4. Herran, M.A.; Katz, M., and Creasy, R.K.: Evaluation of Preterm Birth Prevention Program: Preliminary Report, Obstet. Gyncol. 59:452-456, 1982.
5. Merkatz, I R , Peter, J.B., and Barden, T.P.: Ritodrine Hydrochloride: Betamimetic Agent for Use of Preterm Labor. II. Evidence of Efficacy, Obstet. Gynecol. 56:7-12, 1980.
6. Barden, T.P.; Peter, J.B., and Merkatz, I.R.: Ritodrine Hydrochloride: Betamimetic Agent for Use in Preterm Labor. I. Pharmacology, Clinical History, Administration, Side Effects and Safety, Obstet. Gynecol. 56:1-6, 1980.
7. Benedetti, T.J.: Maternal Complications of Parenteral *B*-sympathomimetic Therapy for Premature Labor, Am. J. Obstet. Gynecol. 145.1-10, 1983.
8. Cordero, L.; Backes, C.R., and Zuspan, F.P.: Very Low Birth Weight Infant. I. Influence of Place of Birth on Survival, Am. J. Obstet. Gynecol. 143:533-537, 1982
9. Cruikshank, D.P., and Ptkin, R.M.: Delivery of Premature Breech, Editorial, Obstet. Gynecol. 50:367, 1977.
10. Woods, J.R. Jr.: Effects of Low Birthweight Breech Delivery on Neonatal Mortality, Obstet. G;ynecol. 53:736, 1979.
11. Mann, L I., and Gallant, J.M.: Modern Management of Breech Delivery, Am. J. Obstet. Gynecol. 134:611, 1979.
12. Karp, L E.; Doney, J.R., and McCarthy, T. et al: Premature Breech: Trial of Labor or Cesarean Section? Obstet. Gynecol. 53:88-92, 1979.
13. Duenholter, J.H.; Wells, C.E.; Reisch, J.S.; Santos-Ramos, R., and Jimenez, J.M.: Paired Controlled Study of Vaginal and Abdominal Delivery of Low Birthweight Breech Fetus, Obstet. Gynecol. 54.310-313, 1979.
14. Ingemarsson, I.; Westgren, M., and Svenningsen, N.W.: Breech Presentation Delivered by Cesarean Section, Lancet 2:172, 1978.
15. Bowes, W.A ; Taylor, E.S.; O'Brien, M., and Bowes, C.: Breech Delivery: Evaluation of Method of Delivery of Perinatal Results and Maternal Morbidity, Am. J. Obstet. Gynecol. 135:965-973, 1979.
16. Hardt, N.; Ogburn, M.; Cruz, A., and Resnick, M.: Impact of Delivery on Outcome of Very Low Birthweight Infants, Abstract. Presented at Annual Meeting, Society of Perinatal Obstetricians, February 1982.
17. Toaff, R., Toaff, M.E., and Ballas, S., et al: Cervical Incompetence: Diagnostic and Therapeutic Aspects, Isr. J. Med. Sci. 13:39, 1977.
18. Barter, R H.; Busbabek, J.A., and Riva, H.L., et al: Surgical Closure of Incompetent Cervix During Pregnancy, Am. J. Obstet. Gynecol. 75:511-524, 1958
19. Harger, J H.: Comparison of Success and Morbidity in Crevical Cerclage Procedures, Obstet. Gynecol. 56:543-548, 1980.

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Obstetrical ultrasound: an overview and update

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ABSTRACT: Real-time ultrasound has become an important tool in the armamentarium of modern obstetrical practice. It is an efficient and accurate method for determining fetal viability and gestational age. In second trimester genetic studies sonography is indispensible in evaluating fetal anatomy and for amniocentesis guidance. By the serial measurements of multiple parameters the fetus at risk for growth abnormalities may be identified early. The assessment of fetal breathing and other fetal body movements can reflect the state of fetal well being. The field of fetal therapy, both medical and surgical, is still in its infancy but developing rapidly.

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With the introduction of real-time technology in the early 1970's and its subsequent improved resolution, ultrasonography has become an increasingly popular tool in the armamentarium of the obstetrician, both in the office and hospital practice.[1,2] It has made the diagnosis of many obstetrical conditions more precise and has improved overall care of the pregnant patient.

In the evaluation of more than 5,000 obstetrical patients by both conventional static scanner and real-time scanner, Hadlock et al found that real-time alone was adequate in 97% of cases without loss of pertinent information. The ability to demonstrate fetal movement, particularly cardiac activity, the ease with which various anatomical planes can be demonstrated, mobility of the unit, and its cost-time effectiveness make real-time ultrasound the modality of choice for obstetrical use.[3]

The energy levels generated by diagnostic ultrasound are low and to date no definite deleterious effects to mother or fetus have been demonstrated. The October 1981 American College of Obstetricians and Gynecologists technical bulletin on ultrasound reported that the average dose of energy delivered by B-scan, real-time, or Doppler ultrasound units is 5-20 milliwatts per centimeter square, and that no tissue damage has been found with energy emission levels in this range.

The applications of real-time ultrasound in modern obstetrics include: establishing fetal viability, dating of pregnancy, assessment of fetal anatomy, evaluation of fetal growth, determination of placental position and assess its maturity, guidance for amniocentesis, assessment of fetal well-being, and in utero fetal therapy.

Establishing fetal viability • In the 20% of patients who experience bleeding in early pregnancy, ultrasound is helpful in establishing a diagnosis, planning the management, and relieving the anxiety of the patient. A gestational sac can be visualized in the uterus at five to six weeks menstrual age. The fetal pole is visible between six and seven weeks and fetal cardiac activity is visible at seven to eight weeks. Fetal somatic activity is seen at eight to nine weeks.[4]

Bleeding prior to seven weeks often presents a diagnostic problem sonographically since the fetal pole and/or cardiac activity may not yet be visible. The differentiation between an early normal gestation and a blighted ovum or a missed abortion at times is difficult by a single sonographic examination. A repeat study in 10 to 14 days may be helpful.

The visualization of a true gestational sac in the uterus of a patient suspected to have an ectopic pregnancy is reassuring since the coexistence of an intrauterine and ectopic pregnancy is extremely rare. However, when the pregnancy test is positive and a gestational sac cannot be demonstrated in the uterus, the diagnosis of an ectopic pregnancy must be considered. The use of serial quantitative serum beta subunit chorionic gonadotropin titers plus repeat ultrasound will help to differentiate a very early intrauterine pregnancy from an ectopic pregnancy.[5]

As pregnancy advances, sonographic visualization of fetal cardiac activity is the most direct and accurate method for determining fetal life.[6]

Dating of pregnancy • The establishment of an accurate gestational age often becomes the cornerstone in obstetrical decision making. Prior to the 7th week the gestational sac dimensions are the only sonographic measurements available.[7] The accuracy of this determination is considered to be only plus or minus two weeks.

Between the 7th and 12th gestational weeks the fetal crown-rump length (CRL) can be measured. (Fig. 1). Careful multiple measurements give an accuracy of plus or minus four days.[8] Because of increased flexion of the fetal body the CRL looses its accuracy after the 12th to 13th week.

From the 12th week to term the biparietal diameter (BPD) can be used for pregnancy dating. Great care must be exercised to obtain the BPD measurement at the proper plane in the fetal head with the falx cerebri in the midline at the level of the thalami and septum pellucidum (Fig. 1). Because of increasing thickness of the skull as well as increasing biological variation as term approaches, this measurement is most accurate in the early second trimester (7-10 days). By the late third trimester the accuracy is plus or minus three weeks. By using two BPD measurements in the second trimester, six weeks apart, Sabbagha has proposed a growth adjusted sonographic age (GASA) which improves the accuracy of the gestational age as determined by the BPD.[9]

The fetal femur length (FL) has been proposed as a reliable method for estimating gestational age[10] especially in those cases when an accurate BPD cannot be obtained. An average of several measurements of the diaphysisi is obtained (Fig. 1). The accuracy of the FL for pregnancy dating compares favorably with the BPD.[11]

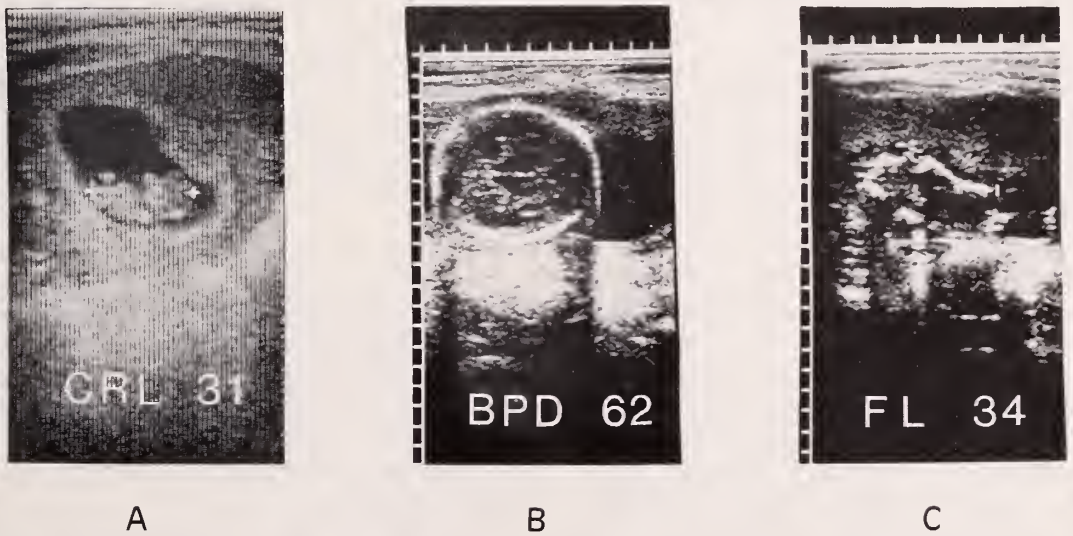


Fig. 1.—Real-time ultrasound images used for gestational age determination: A. crown-rump length (CRL); B. Biparietal diameter (BPD); C. fetal femur length (FL).

A recent report from Yale has proposed the measurement of the inner and outer orbital diameters as an alternative method of pregnancy dating as well as prenatal diagnosis.[12]

Assessment of fetal anatomy • Because the antenatal diagnosis of congenital anomalies is a major objective of ultrasonography, this examination is generally performed by a highly skilled sonologist well experienced in his field (stage II exam), as the evaluation of certain fetal structures requires expertise. The examination begins with an assessment of the amniotic fluid (AFV) since either an increase or a decrease in volume may be associated with fetal anomalies. Approximately 18% of patients with polyhydramnios have anomalous fetuses involving the central nervous system or the gastrointestinal system.[13] Oligohydramnios early in pregnancy may be associated with urinary tract anomalies.

Since the fetal head can be visualized in the late first trimester (10th to 12th week) and the fetal spine at about the 13th week, major craniospinal defects could be detected in the second trimester. Anencephaly is recognized by the absence of the calvarium. The normal fetal spine is visualized longitudinally as two parallel lines. In spina bifida divergence of the spine is seen at the site of a defect. On cross section there is absence of the posterior arch of the spine at the site of the defect.[14]

Intracranial structures can be visualized in the second trimester. The diagnosis of early hydrocephalus may be made by demonstrating abnormal ventricular dilatation prior to enlargement of the fetal head.[15]

Fetal cardiac anatomy can be clearly visualized by the 20th week. In conjunction with fetal echocardiography a detailed study of the fetal heart including chamber sizes, valve and septal defects, and heart rhythm can be made.[16]

A sonolucent mass in the fetal thorax usually displacing the fetal heart posterolaterally is indicative of a diaphragmatic hernia. A large hernia appearing early in pregnancy usually portends a poor diagnosis because of the concomitant presence of hypoplastic lungs.

The abdominal wall integrity can also be established. An omphalocele is distinguished from gastroschisis by a membrane surrounding the herniated abdominal content. Amniotic fluid and maternal serum alpha fetoprotein may be elevated in these conditions. Fetal ascities can be readily identified by the sonolucency within the fetal abdomen, and may be seen in a variety of conditions including isoimmunization, gastrointestinal, genitourinary, and cardiac abnormalities. An increase in the diameter of the umbilical vein has been reported to be an early sign of fetal cardiovascular overload prior to the development of ascites.[17]

The fetal kidneys can be seen from about the 16th week and are easily identifiable because of their characteristic sonic appearance. The combined renal circumference to abdominal circumference ratio is approximately 0.3 and is constant for the duration of pregnancy.[18] Infantile polycystic kidneys and multicystic kidneys are often discernable by the 20th week because of increasing renal size. Renal angenesis or severe dysplasia will be associated with nonvisualization of the fetal bladder and oligohydramnios. Attempts may be made to demonstrate the fetal bladder by maternal hydration and administration of diuretics.[19] The sonographic appearance in urinary tract obstruction varies with the site of obstruction. Slight dilation of the renal pelvis is a normal finding. The ureters are not visible unless distended by obstructive disease. A slightly distended fetal urinary bladder does not per se indicate obstruction since fetal urination is sporadic at 60 to 90 minute intervals. Repeat examinations are necessary to determine the presence and degree of obstruction.

Various skeletal dysplasias and dwarfisms have been diagnosed sonographically.[20] Normal values are available for long bone measurements. In addition other features such as prominent forehead, facial features and intraorbital diameters have been studied.[12]

Fetal sex determination is variable and depends on gender as well as fetal position. The fetal scrotum or penis may be identified as early as the 20th week. The labia may be identified by the 26th to 28th week.

The three vessels in the umbilical cord should be identified. The absence of an umbilical artery should alert the examiner to the possibility of other anomalies.

When a fetal anomaly is suspected attempts should be made to specifically identify the anomaly prenatally as well as to determine the possible coexistence of other anomalies. The prenatal diagnosis of a lethal anomaly may influence obstetrical management and subsequent mode of delivery of the patient.

Evaluation of growth • Intrauterine growth retardation (IUGR) may result from systemic maternal disease, placental abnormalities, or intrinsic fetal conditions. Small for gestational age (SGA) infants are difficult to detect clinically and are at high risk for congenital anomalies as well as other neonatal complications.

Sonographically the serial examinations of multiple parameters will help in the identification of the SGA fetus. In addition to the BPD, measurement of the occipitofrontal diameter (OFD) will permit the calculation of the head circumference (HC)

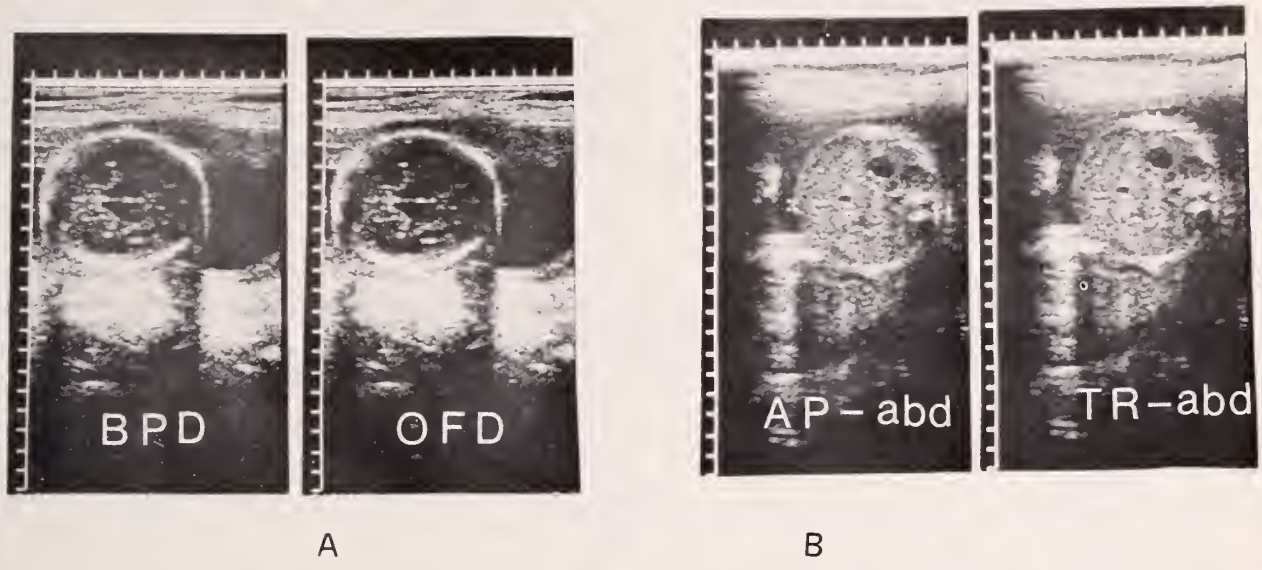


Fig. 2.—Real-time ultrasound images used to determine circumferences in evaluation of fetal growth: A. fetal head (BPD and OFD); B. fetal trunk at level of umbilical vein (AP and transverse).

using the formula $C = \frac{\pi (d_1 + d_2)}{2}$ (Fig. 2). This will also compensate for errors in the BPD resulting from a flattened or rounded head. Using the same formula the fetal abdominal circumference (AC) can be calculated when a cross section of the fetal abdomen is measured at the level of the umbilical vein (Fig. 2). Since the fetal head is usually larger than the fetal abdomen prior to 36 weeks and smaller after 36 weeks, the calculation of the HC/AC ratio may be helpful in identifying growth retardation of the asymmetric type [21] This type tends to occur later in pregnancy and often is associated with a decrease in amniotic fluid volume. Symmetrical growth retardation tends to develop early in pregnancy, is associated with an increased incidence of congenital anomalies, and the amniotic fluid volume tends to be within normal limits. The estimated fetal weight may be calculated using a combination of the BPD and AC measurements.[22]

The total intrauterine volume determination is another parameter for evaluating fetal growth.[23] This examination cannot be performed using the currently available real-time scanners. The larger, more costly, static B-scanner is needed; therefore, this determination is usually performed in hospital-based ultrasound laboratories.

These measurements will also identify the large for gestational age (LGA) fetus, often seen in diabetic mothers. Recently some attention has been focused on evaluating fetal muscle and subcutaneous fat by measuring the fetal thigh circumference. There seem to be a good correlation between a fetus' weight and its thigh circumference especially in diabetic patients.[24]

In modern obstetrical ultrasound the trend has been toward use of multiple fetal parameters for the evaluation of gestational age and fetal growth (Table 1). A single BPD measurement especially in the last trimester is a thing of the past.[25]

Assessment of placental position and maturity • The placenta is clearly visualized by ultrasound and the accuracy in the diagnosis of placenta previa is better than 95%. The equipment can be easily taken to the bedside and the patient must be scanned initially with a partially distended bladder. The placental location is examined in relation to the lower uterine segment. In a posterior placenta the presenting part may obscure the visualization of the lower uterine-internal cervical os area. Gentle upward pressure on the presenting part may allow better visualization of that area. A fetal skull-maternal sacrum distance of less than 1.5 cm is an indirect method of excluding a posterior placenta previa.[26] The diagnosis of a partial placenta previa should be reconfirmed after the bladder is emptied, since anatomical distortions may result from a bladder which is too distended.

Second trimester studies have revealed an incidence for placenta previa of 20%;[27] however, the incidence of placenta previa at term is 0.5%. With the rapid uterine growth in the third trimester and the development of the lower uterine segment, the placenta usually retracts. A placenta previa in the second trimester should therefore be reexamined near term.

A system of placental grading based on the degree and distribution of placental calcification has been devised by Grannum et al.[28] Four grades (0

Table 1. — **Multiple parameter table of normal values at various gestational weeks. (Courtesy of Frank Hadlock, M.D.)**

PREDICTED FETAL MEASUREMENTS AT SPECIFIC MENSTRUAL WEEKS

Menstrual Age (weeks)	BPD* (cm)	Head Circumference* (cm)	Abdominal Circumference* (cm)	Femur Length* (cm)
12	2.0	7.1	5.6	0.8
13	2.3	8.4	6.9	1.1
14	2.7	9.8	8.1	1.5
15	3.0	11.1	9.3	1.8
16	3.3	12.4	10.5	2.1
17	3.7	13.7	11.7	2.4
18	4.0	15.0	12.9	2.7
19	4.3	16.3	14.1	3.0
20	4.6	17.5	15.2	3.3
21	5.0	18.7	16.4	3.6
22	5.3	19.9	17.5	3.9
23	5.6	21.0	18.6	4.2
24	5.8	22.1	19.7	4.4
25	6.1	23.2	20.8	4.7
26	6.4	24.2	21.9	4.9
27	6.7	25.2	22.9	5.2
28	7.0	26.2	24.0	5.4
29	7.2	27.1	25.0	5.6
30	7.5	28.0	26.0	5.8
31	7.7	28.9	27.0	6.1
32	7.9	29.7	28.0	6.3
33	8.2	30.4	29.0	6.5
34	8.4	31.2	30.0	6.6
35	8.6	31.8	30.9	6.8
36	8.8	32.5	31.8	7.0
37	9.0	33.1	32.7	7.2
38	9.1	33.6	33.6	7.3
39	9.3	34.1	34.5	7.5
40	9.5	34.5	35.4	7.6

* ± 2SD

through III) have been described with grade III being the most mature and usually seen after 36 weeks in about 10-20% of normal patients. Grade III placentas have been associated with a mature lecithin-sphingomyelin (L/S) ratio and could possibly be used as a predictor of fetal lung maturity.

Guidance for amniocentesis • Amniocentesis is an invaluable procedure but invasive and not without the potential for severe complications. In modern obstetrics amniocentesis should never be performed without ultrasonic guidance.

For genetic studies in the second trimester the procedure is best performed at about the 16th week. Immediately after a complete sonographic examination the procedure is performed without moving the patient. A pocket of fluid is located away from the fetus and the placenta. The depth to the pocket is measured and the fluid is removed using a 20 to 22 gauge spinal needle under local anesthesia following surgical preparation of the skin. If an anterior placenta must be penetrated it is done at the periphery to avoid the site of the cord insertion and the major placental vessels. The first few milliliters obtained are discarded to avoid accidental culturing and karyotyping of maternal cells. Two ml of fluid are then withdrawn for AFP determinations and another 20 ml are withdrawn and kept in a sterile syringe for culturing. There is an increasing trend today to perform the genetic amniocentesis under ultrasonic visualization of the needle. Fetal viability is confirmed after the tap. If the patient is rhesus negative and not immunized, she should receive Rh immune globulin.

In the Rh-negative and sensitized patient, amniocentesis and photospectrometric analysis of the fluid for bilirubin (ΔOD_{450}) is the most accurate method to evaluate the extent of fetal compromise. All attempts should be made to avoid the placenta. In the severely affected patients, when clinically indicated, intrauterine transfusion of the fetus can be performed under ultrasonic guidance on the labor and delivery unit without the inconvenience and hazardous exposure of x-ray.

Assessment of fetal pulmonary maturity by amniotic fluid study is essentail when elective termination of pregnancy is contemplated and the gestational age is uncertain, or prior to medically indicated induction of labor. If no safe window is identified by ultrasound, amniocentesis may be done suprapubically after the patient voids completely. The fluid sample is studied for the lecithin/sphingomyelin ratio or for phosphatidyl glycerol. Meconium stained fluid may be indicative of fetal distress.

A newer indication for amniocentesis is the sampling of fluid in patients at risk for amnionitis. Fluid samples are cultured and studied by gram stain for bacteria and white blood cells.[29]

Assessment of fetal well being • Doppler ultrasound has been used for fetal monitoring in labor as well as for nonstress and contradiction-stress test monitoring.

Fetal breathing movements can be clearly demonstrated by real-time ultrasound and have been shown to vary with multiple factors. By correlating fetal breathing movements with gross fetal body movements, fetal tone, amniotic fluid volume and the nonstress test a biophysical profile reflecting fetal well-being has been proposed.[30] As fetal breathing is sporadic there may normally be long periods of apnea creating prolonged examination time. This, plus lack of standardization, has limited the general usefulness of this examination.

Fetal therapy • Although intrauterine transfusion is a form of fetal therapy and was first described by Liley in 1963,[31] the 1980's will most likely be the decade of in utero surgery. High resolution ultrasound has permitted a more detailed study of fetal anatomical structures and fetoscopy permits direct visualization of the fetus and the sampling of fetal blood or tissue. Fetal arrhythmias have been treated successfully by the administration of cardiotonic medications to the mother or directly into the amniotic fluid.

Obstructive conditions of the urinary tract and hydrocephaly have also been treated in utero. Under ultrasonic guidance, especially designed catheters have been placed into the fetal cranium and fetal bladder draining the fluid into the amniotic cavity. This relieves the pressure and prevents further distruction of kidney or brain tissue. Improved tocolytic agents may allow more direct intervention by hysterotomy in the future.

The accessibility of the fetus to transabdominal manipulations raises ethical and philosophical questions. "How aggressive should the treatment be of previable fetuses shown by ultrasound or other means to be damaged? Who should authorize plausible but previously untried interventions on the fetus? How should the wishes of the parents be weighed in the balance? How should the risk-benefit ratio be assessed."[32]

Acknowledgement

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References

1 Hohler, C W . Private Practice Use of Real-time B-scan Ultrasound in Obstetrics and Gynecology, J. Clin Ultrasound 6:241-143, 1978

2 Anderson, S Q Real-time Sonography in Obstetrics, Obstet. Gynecol 51:284-287, 1978

3 Hadlock, F P , Deter, R L., and Park, S K Real-time Ultrasound in Evaluation of Obstetric Patient, Perinatal-Neonatal Jan /Feb., 1981.

4 Athey, P.A., and Hodlock, F.P.: Ultrasound in Obstetrics and Gynecology. C.V. Mosby Company, St Louis, 1981, p. 5.
5. Kadar, N., et al: Discriminatory hCG Zone: Its Use in Sonographic Evaluation for Ectopic Pregnancy, Obstet. Gynecol. 58:156, 1981.
6. Levine, S.G., and Filly, R.A.: Accuracy of Real-time Sonography in Determination of Fetal Viability, Obstet. Gynecol. 49:475-477, 1977.
7. Robinson, H.P.: "Gestation Sac" Volumes as Determined by Sonar in First Trimester of Pregnancy, Br J. Obstet. Gynecol. 82:100, 1975.
8 Robinson, H.P., and Fleming, J.E.: Critical Evaluation of Sonar Crown Rump Length Measurements, Brit. J. Obstet. Gynecol. 82:702, 1975.
9 Sabbagha, R.E.; Hughey, M., and Depp, R.: Growth Adjusted Sonographic Age (GASA): Simplified Method, Obstet. Gynecol. 51:383, 1978
10. O'Brien, G.D., and Queenon, J.T.: Growth of Ultrasound Fetal Femur Length During Normal Pregnancy, Am J. Obstet. Gynecol. 141:833, 1981.
11. Hohler, C.W., and Quetel, T.A.: Comparison of Ultrasound Femur Length and Biparietal in Late Pregnancy, Am. J. Obstet. Gynecol. 141.759, 1981
12. Mayden, K.L., et al: Orbital Diameters: New Parameter for Prenatal Diagnosis and Dating, Am. J. Obstet. Gynecol 144 289, 1982.
13. Hobbins, J.C., et al: Ultrasound in Diagnosis of Congenital Anomalies, Am. J Obstet. Gynecol. 134:331, 1979.
14. Miskin, M., et al: Ultrasonic Assessment of Fetal Spine Before Twenty Weeks Gestation, Radiology 132:131, 1979
15. Denkhaus, H., and Winsberg, F.: Ultrasonic Measurement of Fetal Ventricular System, Radiology 131:781-787, 1979
16. Devore, G., et al: Fetal Echocardiography. 1. Normal Anatomy by Real-time Directed M-mode Ultrasound, Am. J. Obstet Gynecol. 144:249, 1982.
17. Devore, G., et al: Dilation of Fetal Umbilical Vein in Rh Hemolytic Anemia-a Predictor of Severe Disease, Am. J. Obstet. Gynecol. 141:464-466, 1981
18. Grannum, P., et al: Assessment of Fetal Kidney Size in Noraml Gestation by Comparison of Ratio of Kidney Circumference to Abdominal Circumference, Am. J. Obstet. Gynecol. 136:249, 1980.
19. Wlahimiroff, J.W: Affect of Frusemide on Fetal Urine Production, Br. J. Obstet Gynecol. 82:221, 1975.
20. Hobbins, J.C., and Mohoney, M.J.: Diagnosis of Skeletal Dysplasias with Ultrasound. In Principles and Practice of Ultrasound in Obstetrics and Gynecology, R.C. Saunders, A.E. James, ed., 2nd ed., Appleton-Century-Crofts, New York, 1980.
21. Cambell, S., and Thomas A: Ultrasonic Measurement of Fetal Abdominal Circumference Ratio in Assessment of Growth Retardation, Brit. J. Obstet. Gynecol 84 165, 1977.
22. Warsof, S.L., et al: Estimation of Fetal Weight by Computer-Assisted Analysis, Am. J. Obstet. Gynecol. 128.881, 1977.
23. Gahari, P.; Berkowitz, R.L., and Hobbins, J.C.: Prediction of Intrauterine Growth Retardation by Determination of Total Intrauterine Volume, Am. J. Obstet. Gynecol. 127:255, 1977.
24 Platt, L.D., et al: Use of Femoral Soft Tissue Diameters in Prediction of Macrosomic Babies, Jour. A.I.U.M., Official Proceedings, AIUM/SDMS Annual Convention, October 4-8, 1982, p. 97.
25. Hadlock, F., et al. In Press, J. Clin. Ultrasound, John Wiley and Sons, Inc., New York
26. Edelstone, D: Placental Localization by Ultrasound, Cl. Obstet. Gynecol. 20:285, 1977.
27. Wexler, M.C., and Gattesfeld, K.R., Second Trimester Placenta Previa — Apparently Normal Placentation, Obstet. Gynecol. 50:706, 1979.
28. Grannum, P.; Berkowitz, R.L., and Hobbins, J.C.: Ultrasonic Changes in Maturing Placenta and Their Relation to Fetal Pulmonic Maturity, Am. J. Obstet. Gynecol 133:915, 1979
29. Bobitt, J.R., and Ledger, W.J: Amniotic Fluid Analysis — Its Role in Maternal and Neonatal Infection, Obstet. Gynecol. 51:56, 1978.
30. Manning, F.A.; Platt, L.D., adn Sipas, L.: Antepartum Fetal Evaluation: Development of Fetal Biophysical Profile, Am. J. Obstet. Gynecol. 136:787, 1980.
31. Liley, A.W. Liquor Amnii Analysis in Management of Pregnancy Complicated by Rhesus Sensitization, Am. J. Obstet. Gynecol. 82:1359, 1961
32. Avery, G.B.: Editorial, JAMA 248:2498, 1982.

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Management of preterm premature rupture of membranes

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ABSTRACT: Management of preterm premature rupture of membranes remains a dilemma for obstetricians despite recent advances in perinatal techniques. The numerous studies and resulting recommended protocols agree that respiratory distress syndrome is the leading cause of neonatal mortality and morbidity in the preterm infant with premature ruptured membranes. There are conflicting data regarding the effective use of tocolysis and steroids. Whatever modalities or protocols are utilized, the current recommendation is that patients less than 34 weeks gestation with premature ruptured membranes be referred to tertiary perinatal centers where both obstetrical and neonatal expertise is available.

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One of the most controversial issues in modern obstetrics is management of the patient with premature rupture of the membranes (PROM) in the preterm gestation. The dilemma of management remains in spite of strides in perinatology, both in techniques and equipment, improved gestational dating with ultrasound, fluid analysis via amniocentiesis, and management approaches such as corticosteroids and tocolytic agents.

Most obstetricians agree that PROM is "rupture at any time before the onset of uterine contractions." Preterm PROM refers to rupture of membranes prior to the onset of uterine contractions in a pregnancy of less than 37 weeks. Respiratory distress syndrome (RDS) is most commonly defined as: (a) early onset after birth, (b) tachypnea, expiratory grunting and inspiratory retractions, (c) cyanosis and hypoxia, (d) typical findings on the chest radiograph.[1] Maternal sepsis is variously described as fever or clinical impression but seldom documented with blood or genital tract cultures. Neonatal sepsis is similarly not well defined or documented with positive cultures.

The incidence of preterm PROM is about 1-2% of all pregnancies. In selecting a management protocol, the causes of morbidity and mortality in the neonate and the mother must be examined.

In those neonates 34 weeks and below, the leading cause of morbidity and mortality is related to prematurity, especially RDS. In those greater than 34 weeks, the leading cause is related to sepsis. This has led to most management protocols recommending that delivery be effected if PROM occurs at 34 plus weeks gestation. Maternal complications are related mainly to duration of ruptured membranes, whatever the gestational age.

Some management protocols for preterm PROM have been as follows:

1. Conservative approach of watchful waiting until labor begins or amnionitis is evident.
2. Immediate delivery because of potential risks of infection in mother and newborn.
3. Timed delivery after 16 hours of ruptured membranes to allow for lung maturation. Perinatologists are about evenly split on this concept. A recent study at Yale[2] did show that PROM of longer than 16 hours statistically reduced the incidence of RDS in infants born after 31 weeks gestation and in addition improved the survival for infants after 33 weeks. Other studies both support and contradict this.
4. Timed delivery at 24 plus hours after glucocorticoid administration in gestations of 26-32 weeks. There have been six studies that report significant decrease in RDS[3-8] but seven others report no significant decrease when steriods were used in patients with PROM.[9-15] Tocolytic agents, mainly ritodrine hydrochloride, were used to prevent labor during the time of steroid use.
5. Determination of lung maturity by amniocentesis[16] or by collecting amniotic fluid from the vagina for presence of phosphatidyl glycerol or an L/S ratio greater than two. The problem with the above methods is that fluid is obtainable in only 50% of the cases.

The increasing knowledge of the pathophysiology of PROM including the clinical variables, physical properties of the membranes, and subclinical infection have helped add new diagnostic and management techniques. The best way to manage PROM in the preterm infant is still unclear. Studies have been numerous, protocols varied and results conflicting. The overwhelming data that have to be considered show that the major cause of neonatal mortality and morbidity in cases of preterm PROM is RDS. In both frequency and severity, RDS is a much greater threat than neonatal sepsis. In four major studies the major causes of death were RDS (29-70%), infection (3-19%), asphyxia-anoxia mainly in still-births greater than 1000 grams (5-46%), and congential anomalies (10-27%).[10,19] Maternal mortality is extremely rare no matter what the management course followed. Most studies report cesarean section rates with PROM are significantly higher as are postpartum endometritis rates. Whether tocolytic agents are beneficial for anything other than delaying delivery long enough for corticosteroids to be given is debatable. The studies are inconclusive concerning the benefits of steroids in reducing RDS in preterm PROM.

Current recommendations concerning management of preterm PROM stress the need to document the ruptured membranes via examination, nitrazine and fern tests, accurately determine gestational age, and for preterm pregnancies 34 weeks or less referral and complete perinatal care at a tertiary center.

References

1 Gibbs, R.S. and Blanco, J.D.: Premature Rupture of Membranes, Obstet. Gynecol. 60: 671, 1982.
2 Berkowitz, L.; Hoder, E.L., and Freedman, R.M., et al: Results of Management Protocol for Premature Rupture of Membranes, Obstet. Gynecol. 60:271, 1982.
3 Nochimson, D.J.; Petrie, R.H., and Shah, B.L., et al: Comparison of Conservative and Dynamic Management of Premature Rupture of Membranes/Premature Labor Syndrome, Clin. Perinatol. 7:17, 1980.
4 Mead, P.B. and Clapp, J.F.: Use of Betamethasone and Timed Delivery in Management of Premature Rupture of Membranes in Preterm Pregnancy, J. Reprod. Med. 19:3, 1977.
5 Papageorgiou, A.N.; Desgranges, M.F., and Masson, M. et al: Antenatal Use of Betamethasone in Prevention of Respiratory Distress Syndrome: Controlled Double-Blind Study, Pediatrics 63:73, 1979.
6 Caspi, E., Schrever, P., and Weinraub, Z., et al. Dexamethasone for Preventtion of Respiratory, Distress Syndrome: Multtple Perinatal Factors, Obstet. Gynecol. 57: 41, 1981.
7 Young, B.K., Klein, S.A., and Katz, M., et al: Intravenous Dexamethasone for Prevention of Neonatal Respiratory Distress: Prospective Controlled Study, Am. J. Obstet. Gynecol. 138:203, 1980.
8 Ballard, R.A., Ballard, P.L., and Granbert, J.P., et al: Prenatal Admintstration of Betamethasone for Prevention of Respiratory Distress Syndrome, J. Pediatr. 94:97, 1979.
9 Kappy, K.A., Cetrulo, C.L., and Knuppel, R.A., et al: Premature Rupture of Membranes: Conservative Approach, Am. J. Obstet. Gynecol. 134:655, 1979.
10 Eggers, T.R., Dyle, L.W., and Pepperell, R.J.: Premature rupture of Membranes, Med. J. Aust. 1:209, 1979.
11 Christensen, K.K., Ingemarsson, I., and Leideman, T., et al: Effect of Rttodrine on Labor After Premature Rupture of Membranes, Obstet. Gynecol. 55:187, 1980.
12 Garite, T.J.; Freeman, R.K., and Linzev, E.M., et al: Prospective Randomized Study of Corticosteroids in Management of Premature Rupture of Membranes and Premature Gestation, Am. J. Obstet. Gynecol. 141:508, 1981.
13 Collaborative Group on Antenatal Steroid Therapy: Effect of Antenatal Dexamethasone Administration on Prevention of Respiratory Distress Syndrome, Am. J. Obstet. Gynecol. 141:276, 1981.
14 Taeusch, H.W.; Frigoletto, F., and Kitzmiller, J., et al: Risk of Respiratory Distress Syndrome After Prenatal Dexamethasone Treatment, Pediatrics 63:64, 1979.
15 Block, M.F., Kling, O.R. and Crosby, W.M.: Antenatal Glucocorttcotd Therapy for Prevention of Respiratory Distress Syndrome in Premature Infant, Obstet. Gynecol. 50:186, 1977.
16 Garite, T.J., Freeman, R.K. and Linzey, E.M., et al: Use of Amntocentesis in Pattents with Premature Rupture of Membranes, Obstet. Gynecol. 54:226, 1979.
17 Daikoku, N.H., Kaltreider, F. and Johnson, T.R.B., et al: Premature Rupture of Membranes and Preterm Labor: Neonatal Infection and Pertnatal Mortality risks, Obstet. Gynecol. 58:417, 1981.
18 Bada, H.S., Alonpan, L.C. and Andrews, B.F.: Premature Rupture of Membranes and Its Effect on Newborn, Pediatr. Clin. North. Am. 24:491, 1977.
19 Berkowitz, R.L., Kantor, R.D., and Beck, G.J., et al: Relationship Between Premature Rupture of Membranes and Respiratory Distress Syndrome: Update and Plan of Management, Am. J. Obstet. Gynecol. 131:503, 1978.

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Preeclampsia — eclampsia: an overview

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ABSTRACT: This is a brief review on the prevention and management of preeclampsia and eclampsia which continue to confuse clinicians due to lack of symptoms until the advanced stage. While the etiology remains obscure, treatment must be based upon sound clinical judgment. Prevention of perinatal mortality and eclampsia will only be accomplished if the physician suspects preeclampsia. Furthermore, the obstetrician must have an ongoing dialogue with the internist regarding "pathologic" blood pressures in pregnancy which are quite different from those which are pathologic in the nonpregnant state.

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Preeclampsia and eclampsia remain the enigma of obstetrical practice and research. Since we do not know the etiology, treatment is empirical and symptomatic. In some way chorionic villi in certain women incite vasospasm and hypertension. To effect a cure, the chorionic villi must be expelled or surgically removed.[1] When the baby is premature, it is tempting to temporize in the hope that a few more weeks in utero might give the fetus or newborn a better chance of survival; however, with sever preeclampsia, procrastination may prove ill-advised since this severe disease may cause the death of both fetus and mother. The severe forms of the disease are preventable and should never occur, but once present they should yield a zero maternal mortality rate and a fetal salvage of greater than 90%.[2]

The incidence of preeclampsia is reportedly between 5-8%. Preeclampsia is a disease of the first pregnancy and tends to involve women who are under 20 or over 35 years of age. Among women who are pregnant for the first time after age 25, the diagnosis may be obscured since the mean blood pressure tends to rise with increasing age. If the prepregnancy blood pressure is unknown, the difference between preeclampsia and preeclampsia superimposed upon hypertension is difficult to determine.

Preeclampsia-eclampsia is an important entity for several reasons: (a) It is the second leading cause of maternal deaths in the United States; (b) It is a major cause of perinatal mortality; (c) It is often associated with intrauterine growth retardation (IUGR); (d) It is associated with an increased tendency to mental retardation in surviving offspring.

In 1972 the Committee on Terminology of the American College of Obstetrics and Gynecology, after careful consideration and consultation,

suggested classification for this group of conditions hitherto loosely referred to as "toxemias of pregnancy":

Gestational edema is the occurrence of a general and excessive accumulation of fluid in the tissues of greater than 1 + pitting edema after 12 hours rest in bed or of a weight gain of 2268 grams (5 pounds) or more in one week due to the influence of pregnancy.

Gestational proteinuria is the presence of proteinuria during or under the influence of pregnancy in the absence of hypertension, edema, renal infection, or known intrinsic renovascular disease.

Gestational hypertension is the development of hypertension during pregnancy or within the first 24 hours postpartum in a previously normotensive woman. No other evidence of preeclampsia or hypertensive vascular disease is present. The blood pressure returns to normotensive levels within ten days following parturition.

Preeclampsia is the development of hypertension with proteinuria, edema, or both, due to pregnancy or the influence of a recent pregnancy. It occurs after the 20th week of gestation but it may develop earlier in the presence of a trophoblastic disease. Preeclampsia is predominantly a disorder of primigravids.

Eclampsia is the occurrence of one or more convulsions not attributable to other cerebral conditions such as epilepsy or cerebral hemorrhage in a patient with preeclampsia.

Superimposed preeclampsia or eclampsia is the development of preeclampsia or eclampsia in a patient with chronic hypertensive vascular or renal disease. When the hypertension antedates the pregnancy as established by previous blood pressure recordings, a rise in the systolic pressure of 30 mmHg or a rise in the diastolic pressure of 15 mmHg and the development of proteinuria, edema, or both is required during pregnancy to establish a diagnosis.

Chronic hypertensive disease is the presence of persistent hypertension of whatever cause, before pregnancy or before the 20th week of gestation or, persistent hypertension beyond the 42nd postpartum day.

Unclassified hypertensive disorders are those in which information is insufficient for classification. They should compose a minority of the hypertensive disorders in pregnancy.

Definition of preeclampsia — eclampsia • Preeclampsia is the development of hypertension with proteinuria, edema, or both, induced by the pregnancy after the 20th week of gestation. Generalized edema may or may not be present and should not be required for diagnosis because its occurrence does not affect the perinatal outcome adversely.[3] On the other hand, a rise of blood pressure must coexist with proteinuria during the second half of pregnancy before applying the term preeclampsia. The diagnostic criteria are simple:

(a) The blood pressure is either 140/90 or greater, or it constitutes an increase of 30 mmHg systolic or 15 mmHg diastolic over baseline values. When referring to the blood pressure, Page[4] prefers to utilize the mean arterial blood pressure because physiologically this is the important determinant. MAP =

$$\frac{\text{Systolic Pressure} + \text{Diastolic Pressure} \times 2}{3}$$

According to his criteria, a rise of 20 mmHg in the MAP is significant or if previous blood pressures are not available "hypertension" is a MAP of 105 mm or greater.

Attempts to standardize techniques for obtaining blood pressure levels have been successful. Patients in a supine position can develop the supine hypotensive syndrome, resulting in falsely low values. Standardization of position for recording blood pressure should be continued from the outpatient to the inpatient departments. Ideally, patients who have hypertension as outpatients should have their blood pressures checked in the hospital in a similar standardized fashion. Controversy continues about whether Korotkoff's fifth phase (the disappearance of sound) correlates better with the true diastolic pressure than the fourth phase (muffling). Most Americans use the fifth phase, whereas British investigators and clinicians use the fourth phase because the complete disappearance of sound fails to occur in many pregnant women. However, it is much more difficult to train observers to record the fourth phase, and this difficulty is reflected in a large variance of fourth phase pressure readings; thus, this paper will refer to the fifth phase recording. The physiologic reduction in the mean arterial pressure during weeks 8 to 30 of gestation recognizes the importance of first trimester blood pressure evaluations. The cuff of the sphygmomanometer can be another confounding variable in epidemiologic evaluation.

(b) Proteinuria is usually defined as the presence of 300 mgs or more of protein in a 24 hour urine collection.

(c) Edema is the generalized accumulation of fluid of greater than 1 + pitting edema after 12 hours bed rest or a weight gain of 2268 gms (5 pounds) or more in one week.

According to the American Committee on Maternal Welfare, severe preeclampsia is defined if one or more of the following is found:

(1) Blood pressure of at least 160 mmHg systolic or 110 diastolic on two occasions at least 6 hours apart while the patient is at bedrest.
(2) Proteinuria of at least 5 gm/24 hours or 3+ to 4+ by semiquantitative assay.
(3) Oliguria.
(4) Cerebral or visual disturbances.
(5) Pulmonary edema or cyanosis.

Other symptoms suggestive but not diagnostic of severe preeclampsia are:

(a) Epigastric pain caused by distension of Glisson's capsule or from central nervous system origin.
(b) thrombocytopenia
(c) impaired liver function
(d) weight gain greater than 2 pounds per week while at bedrest.

Etiology • It is difficult to determine the initiating factors(s) in preeclampsia, but the disorder is manifested as a disturbance of water and sodium balance together with vasospasm associated with hypertension,[5] perhaps secondary to hypovolemia.[6] Treatment is directed toward correction of circulatory volume. Others[7] conclude that the slight decrease in blood volume has no hemodynamic relevance; the blood volume is merely fitting a contracted vascular bed while the major abnormality resides in the constricted arteriolar system. Still others think that the etiology might be of immunological origin. Gusdon et al,[8] however, were unable to demonstrate an immunologic basis for preeclampsia. Lueck[9] reported finding worm-like forms in patients with gestational trophoblastic disease and in patients with preeclampsia-eclampsia and hydatidiform mole which contained an agent called hydatoxi lualba — to pregnant dogs caused them to progressively develop hypertension, proteinuria, disseminated intravascular coagulation (DIC), hepatic dysfunction, IUGR, and intrauterine fetal death. This discovery needs substantiation.

Pathology • In 1954 Donnelly and Lock[10] investigated the cause of death in 533 women with toxemia of pregnancy and found that death was directly attributable to the disease in 393 cases. The most common causes of death were cerebral vascular accidents, cardiopulmonary insufficiency, and acute renal failure.

The characteristic lesion in preeclampsia/eclampsia is renal glomerular endotheliosis. Significant liver damage may occur in preeclampsia-eclampsia. In eclampsia, about 75% of the patients show some evidence of hepatic dysfunction but permanent damage is rare. The most common hepatic lesion in the eclamptic patient is periportal hemorrhagic necrosis probably secondary to thrombosis in the hepatic arterioles.

In patients who die of eclampsia, there is almost always evidence of pulmonary edema and diffuse hemorrhagic bronchopneumonia. In the myocardium subendothelial hemorrhages, fibrin thrombi and focal necroses may be found.

Histological changes in the placenta reveal signs of premature aging such as calcification and infarcts.

Management • The first aim of treatment should be prevention of toxemia. We have had more eclamptics transferred from private practice than have occurred in our facility with more than 4,000 clinic deliveries per year. This leads us to believe that some practitioners fail to recognize the relative increases in blood pressures and do not act expectantly. Proper prenatal care with special attention to weight gain and changes or elevation of blood pressure should help to reduce the incidence of the severe forms. The rise in the diastolic blood pressure must be carefully reviewed on each visit. At the University of South Florida we liberally hospitalize patients with mild signs of the disease and once the patient is hospitalized no convulsions should occur (Fig. 1). However, severe preeclampsia dictates rapid and decisive action (Fig. 2). Complete evaluation of the mother and fetus must be accomplished with understanding of the disturbed pathophysiology. We should choose therapy that is beneficial and least harmful to mother and fetus to prevent stroke and stillbirth or neonatal death.[11]

Hospitalization • Patients with pregnancy-induced hypertension (PIH) need to be in the hospital; the left-lateral position promotes improved uteroplacental circulation and dependent edema fluid is mobilized. The patient does not need to be in complete bedrest as has previously been shown by Mathews et al[12] but under close observation so that early signs of acute vasospasm or intravascular coagulation can be detected and so that pregnancy can be promptly terminated if necessary. The patient is watched closely for signs and symptoms of progression of preeclampsia as follows:[13]

(1) Upward trend in the blood pressure, specifically in the diastolic readings (watch for nocturnal hypertension). If previous blood pressures are not available, consider hypertension if MAP is 105 mmHg or greater
(2) appearance or aggravation of proteinuria
(3) sudden appearance or aggravation of facial edema
(4) sudden gain in weight
(5) hyperreflexia

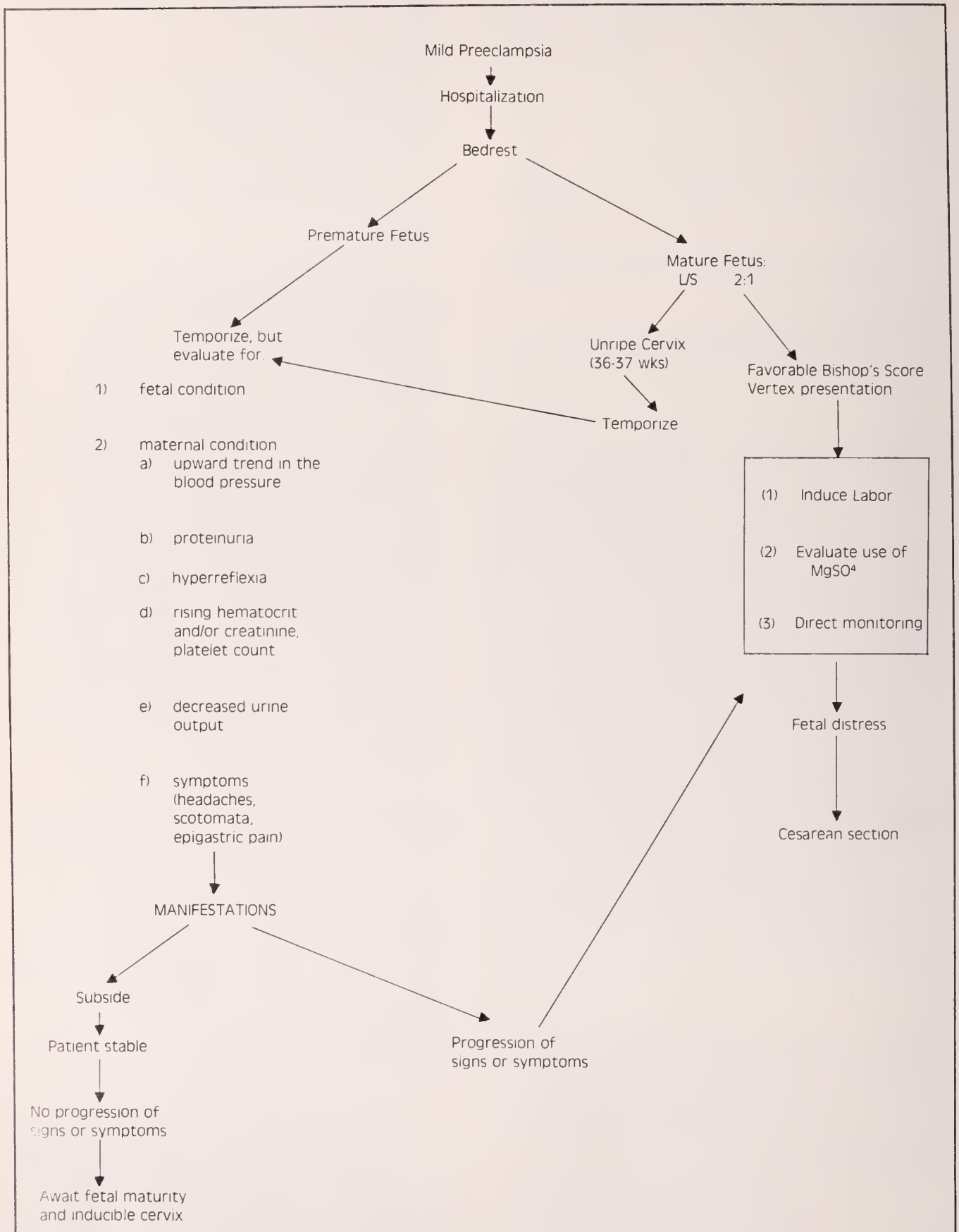


Fig. 1. — Mild preeclampsia treatment procedures.

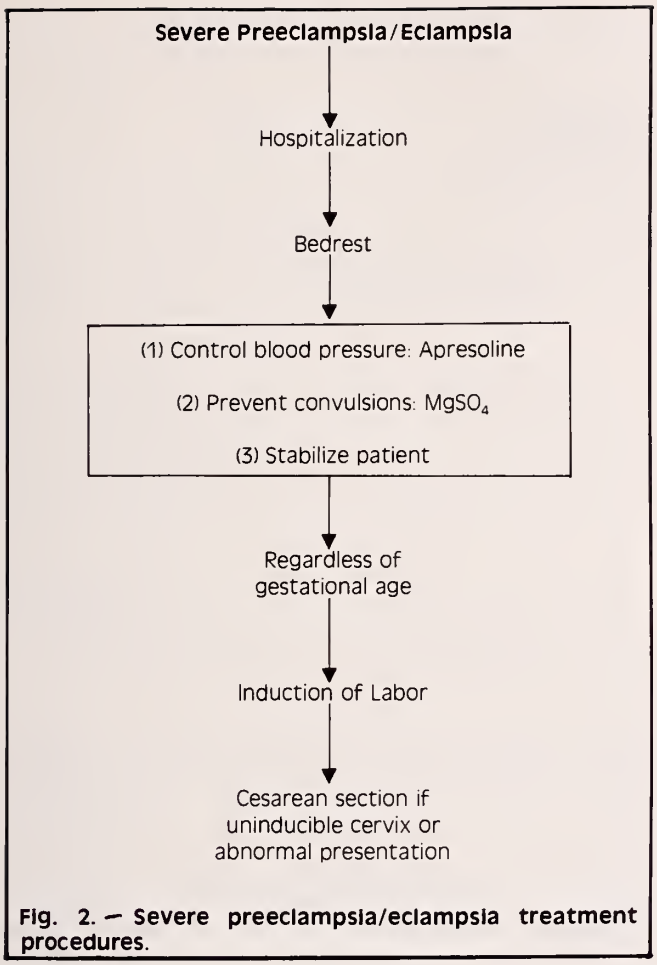


Fig. 2. — Severe preeclampsia/eclampsia treatment procedures.

(6) rising hematocrit
(7) decreasing platelet count
(8) decreasing urinary output
(9) increasing retinal arteriolar spasm
(10) symptoms (headaches, scotomata, epigastric pain).

Laboratory and ancillary tests • *Hematocrit:* A hematocrit that is considerably higher than a routine hematocrit measured just a few weeks earlier may be the result of hemoconcentration, a feature of advanced preeclampsia. The hemoconcentration augments the resistance to flow and imposes a demand for greater cardiac force to maintain the circulation. Such changes may be related to the signs of circulatory failure that characterize about ⅔ of eclamptic patients. Sagen, Koller and Haram[14] found a significant association between increased maternal hemoglobin due to hemoconcentration and perinatal distress and intrauterine growth retardation.

Urine analysis: Look for proteinuria of 300 mg or more of protein in a 24 hour urine collection. Once 2+ proteinuria is present, glomeruloendotheliosis is also present and does not regress until pregnancy is terminated.

Peripheral smear: Evaluate red cell morphology and the number of platelets.

Coagulation studies: Thrombocytopenia according to Pritchard[15] was found in 24 of 91 preeclamptics, or 26% had a platelet count of less than 150,000. In 17% the platelet count was less than 100,000 and in 3% less than 50,000 mm^3. The fibrinogen level is the same or slightly higher than in normal pregnancy. Fibrin degradation products were found in only 3% of 59 eclamptic patients at Parkland Memorial Hospital. Thrombin time is, on the other hand, significantly prolonged in over 50% while prothrombin and partial thromboplastin times are found essentially within normal limits.

Renal and liver functional studies: Much useful information is provided by SMA-12 since we can evaluate renal and liver function. Serum creatinine is usually elevated unless vasospasm is recent. Uric acid levels are sometimes misleading.

Ultrasound: Serial ultrasound examinations, for instance every three weeks, should be performed to evaluate the occurrence of IUGR. Reliance should not be placed only on the biparietal diameter. One should utilize the head/abdominal circumference ratio and femur length to determine if asymmetrical intrauterine growth retardation is present. A grade III placenta in a 32-35 week gestation heightens the awareness of accelerated "aging" and stress on the fetus.

Amniocentesis: If the disease is not severe, close observation to the progression of symptoms is advised until pulmonary maturity is reached (Fig. 1).

Antepartum monitoring: If conservative management is selected, we follow the well-being of the fetus with bi-weekly nonstress tests (NST)[16] and oxytocin challenge test (OCT)[17] only when the NST is nonreactive or unsatisfactory. A fetal movement chart is also used.

Medications • *Magnesium sulfate:* $MgSO_4$ is the drug of choice in the treatment of patients with preeclampsia/eclampsia.[18] Its efficacy in the prevention and control of convulsions associated with preeclampsia is well documented.[19,20] We are currently using the dosage schedule proposed by Zuspan,[2] loading dose of 4 gms IV over a 20 minute period followed with a maintenance dose of 1 g/hr intravenously. Studies by Borges and Gucer[21] demonstrated that magnesium sulfate was able to directly suppress neuronal burst firing and interictal EEG spike generation at serum levels below those producing paralysis. This finding is in disagreement with the experience of Sibai et al[22] who found no quantitative differences in the EEG findings recorded before, during, and after magnesium sulfate treatment. In addition, there was not correlation between serum magnesium levels and EEG findings during magnesium administration.

Toxic side effects include depressed respiration via neuromuscular blocking and cardiac arrest if the drug is given too rapidly or with decreased urine output. In general, the major therapeutic modality of $MgSO_4$ is to prevent a seizure and even though it produces a transient episode of lowering the blood pressure during the first 30-45 minutes, it should not be considered a hypotensive agent. Special considerations about the drug and its administration include: (1) Respiration should be monitored at periodic intervals and should always be greater than 12 per minute. If respiratory depression occurs, 10 ml of 10% calcium gluconate is given intravenously over one to three hours by infusion pump, in addition to standard methods of respiratory support. (2) Reflexes should be checked every hour. If they are absent, $MgSO_4$ should be temporarily discontinued or the dosage decreased. (3) The urine output should continue to be at least 30 cc/hr for continuous $MgSO_4$ IV infusion, the initial loading dose is safe to give even in anuric patients.[23] (4) It is advisable to decrease the amount of succinyl choline in patients on magnesium therapy who receive general anesthesia since these drugs may be synergistic.[24]

Antihypertensive drugs in treatment of PIH • In general we agree that antihypertensive drugs should not be used in preeclamptic patients; however, a very high blood pressure (greater than 160/110 mmHg) requires the administration of an antihypertensive drug.

Hydralazine (apresoline) is a valuable drug for the treatment of hypertension associated with toxemia. This drug exerts its hypotensive effect by reducing vascular resistance through direct relaxation of arteriolar smooth muscle. One cc (20 mg) of apresoline is drawn into a 20 cc syringe. Then add 19 cc of normal saline which results in a concentration of 1 mg/cc. This makes it easy to quantify the amount given. Give a 5 mg (5 cc) bolus and repeat in 20 minutes if there is no response. Hydralazine increases cardiac output and renal blood flow. The final effect on uterine blood flow and placental perfusion, however, is not clear.

Before delivery, if the diastolic blood pressure is 110 mmHg or higher, 5 mg hydralazine is injected intravenously and the blood pressure is monitored every 5 minutes. If the diastolic pressure is not lowered to the desired level of 90-100 mmHg after 20 minutes, 5-10 mg more hydralazine is injected intravenously and the effects of the dose again monitored at 5 minute intervals for 20 minutes. The desired effect is achieved almost always with 5-20 mg of hydralazine. The injection is repeated whenever the diastolic pressure rises to 110 mmHg or higher.[1] Alternatively, hydralazine may be given slowly by continuous intravenous infusion: 20 to 40 mg in 1000 cc 5% dextrose with 0.45% saline. The rate of infusion of the intravenous fluid should be titrated to the patient's blood pressure.

TABLE 1.—Symptoms of Impending Eclampsia.

Symptom	Cause
Severe headache	Cerebral edema
Visual disturbances (scotomata, diplopia, blurred vision)	Cerebral edema
Vomiting	Cerebral edema
Epigastric pain	Stretching of liver capsule or supcapsular hemorrhage

Eclampsia • Eclampsia represents the convulsive phase of preeclampsia. Eclampsia is more prevalent among patients who have inadequate antenatal care and in those who have unsuspected deterioration during the early puerperium (Table 1). Approximately 5% of preeclamptic patients will become eclamptic. Earlier diagnosis, skillful prenatal care, and early management of preeclampsia can reduce the incidence of eclampsia and, thus, the accompanying maternal and perinatal risks. The worldwide perinatal mortality rate associated with eclampsia may be as high as 30% to 35%.[2] Eclampsia is seldom encountered in patients who have received appropriate antenatal care and are promptly hospitalized when the occurrence of preeclampsia first becomes evident.

Management of Eclamptic Seizure (Fig. 2).

(1) Place the patient in a bed with side rails in a quiet, darkened room and keep her on her side. Use gentle restraint and loosen tight clothing.
(2) Administer oxygen.
(3) Give sodium amylbarbital, 0.25-0.5 g, slowly intravenously. Do not over-sedate the patient. (Diazapam 5-10 mg intravenously may be used in the postpartum patient.)
(4) Give magnesium sulfate 2-4 g intravenously over 3-4 minutes. This is followed by 1 g intravenously every hour by infusion.

Routine observations are imperative in eclampsia. The blood pressure, pulse, and respiratory rate should be checked at least every 5 minutes after the convulsion and, when stable, every 15 minutes thereafter. Lungs are checked frequently as acute pulmonary edema is common. A detailed intake and output chart must be available with the amounts

recorded hourly. Blood should be obtained immediately for typing and crossmatching with a baseline hematocrit.

Delivery should be accomplished promptly. Pritchard has reported excellent success in 154 consecutive eclamptics who were treated during a 20-year period. Approximately three fourths of the cases in whom eclampsia developed were delivered vaginally. Steps were initiated to effect delivery as soon as the patient regained consciousness.

The latent period between induction of labor or cesarean section is variable. Procrastination is unwise, and the patient should be delivered soon after stabilization. Most reports reject the theory that there is increased sensitivity of the uterus to oxytocin in eclamptic patients. It is better to deliver a low-birth-weight infant by cesarean section if the cervix is not "ripe" or if the fetus is not in vertex presentation.

During labor the fetal heart rate should be monitored closely. As uterine perfusion is already compromised, persistent late decelerations and fetal acidosis can be anticipated. Abrupt changes in the fetal heart rate have been demonstrated during convulsions.

The patient's fluid intake should be limited, but hypovolemia requires careful correction. Aggressive fluid infusion may produce circulatory overload. The fluid intake for 24 hours should not exceed 1000 ml plus the amount of urinary output of the preceding 24 hours. If the patient is severely hypovolemic and in shock, with monitoring of the central venous pressure (CVP), additional fluid is recommended. Blood replacement, if required, should be initiated early and carefully to prevent overloading of the cardiovascular system. Oliguria is a common consequence of eclampsia and indicates the need for prompt termination of pregnancy.

Diuretics may mask the intensity of the hypovolemia and oliguria. Mannitol may cause fluid overload. Diuretics should be limited to patients with proven pulmonary edema.

Acute pulmonary edema may cause death and should be handled as a very serious medical emergency in an intensive care unit. Treatment involves the administration of oxygen, morphine, and digitalis (Digoxin). Furosemide (Lasix) is a useful drug in treating pulmonary edema; however, theoretical objections have been raised as to its use since increased peripheral resistance and systemic hypertension may lead to left ventricular failure and pulmonary edema. Furosemide and the infusion of colloid or crystalloid solutions should be governed by the pulmonary artery wedge pressure. Digitalization should be considered if signs of congestive heart failure develop. Electrocardiography (ECG) should be performed to determine whether any contraindication to its use exists. Initially, give 0.8 mg deslanoside (Cedilanid-D) intravenously for tachycarida above 120 per minute. Digitalization is maintained with 0.25 mg to 0.5 mg digoxin daily.

Maintenance of a patent airway may require an endotracheal tube. Tracheostomy may be necessary in cases of laryngeal obstruction.

Disseminated intravascular coagulation is rarely a serious problem. The presence of hematuria should raise suspicion but is more commonly due to trauma from the Foley catheter. If hematuria becomes marked, the diagnosis should be established by a coagulation profile showing thrombocytopenia with depression of fibrinogen and factors V, VIII, and XIII, and the presence of fibrin monomers and fibrin/fibrinogen dedradation products. The use of heparin should be considered.

Summary • Pregnancy induced hypertension is a major cause of maternal death and even though its etiology is unknown the severe forms of the disease can be prevented based upon skillful prenatal care. Complete evaluation of the mother and fetus must be accomplished with understanding of the disturbed pathophysiology. The treatment should be promptly undertaken to prevent stroke and stillbirth or neonatal death. A high index of suspicion must be maintained in private practice and emphasis should be placed on the relative rises in blood pressures. Once a patient demonstrates a diastolic rise of greater than 15 mmHg and/or proteinuria she should be hospitalized.

Diagnostic and Management Pearls

1. Watch for first and second trimester decreases in blood pressure.
2. Regard a diastolic rise of 15 mmHg as preeclampsia.
3. Record blood pressure readings with the patient seated.
4. Do not minimize weight gain.
5. Maintain a liberal hospitalization policy.
6. If a "mild" preeclamptic patient is to be managed on an outpatient basis, see her in the office every two days.
7. Watch for fluid overload and/or pulmonary edema in the postpartum period. Intake and output flows sheets must be accurate.
8. Follow fetal condition with serial sonograms, electronic fetal monitoring (weekly from 30 weeks), and aggressive use of amniocentesis for L/S ratio.
9. Use $MgSO_4$ whenever indicated.
10. Err on the side of caution.

References

1 Cavanagh, D. and Knuppel, R.A.: Preeclampsia-eclampsia, in Principles and Practice of Obstetrics and Perinatology, edited by Iffie, L. and Kaminezky, H.A., John Wiley and Sons, Inc., 1981

2 Zuspan, F.: Problems Encountered in Treatment of Pregnancy-Induced Hypertension, Am. J. Obstet. Gynecol. 131:591-597, 1978

3. Weser, J.K.: Hydralazine, N. Engl. J. Med. 295:320-322, 1976.

4 Page, E.W.: On the Pathogenesis of Preeclampsia and Eclampsia, J. Obstet. Gynecol. Br. Commnw. 79:883-894, 1972.

5. Pritchard, A.J.: Use of Magnesium Sulfate in Preeclampsia-Eclampsia, J. Reprod. Med. 107:113, 1979.

6. Goodlin, R.C.: Severe Preeclampsia: Another Great Imitator, Am. J. Obstet. Gynecol. 125:747-753, 1976.

7. Assali, N.S. and Vaughn, D.L.: Blood Volume in Preeclampsia: Fantasy and Reality, Am. J. Obstet. Gynecol. 129:355, 1977

8. Gusdon, J.P.; Heise, E.R., and Herbst, G.A.: Studies of Lymphocyte Populations in Preeclampsia-Eclampsia, Am. J. Obstet. Gynecol. 129:255-267, 1977.

9. Lueck, J.; Brewer, J.I., and Aladjem, S., et al: Observation of Organism Found in Patients with Gestational Thropboblastic Disease and in Patients with Toxemia of Pregnancy, Am. J. Obstet. Gynecol. 145:15-38, 1983.

10. Donnelly, J.F., and Lock, F.R.: Causes of Deatb in Five Hundred Thrity-Three Fatal Cases of Toxemia of Pregnancy, Am. J. Obstet. Gynecol. 68:184, 1954

11 Cruikshank, D.P.; Pitkin, R., and Donnelly, E., et al: Urinary Magnesium, Calcium and Phospbate Excretion During Magnesium Sulfate Infusion, Obstet. Gynecol. 58:430-434, 1981.

12. Mathews, D.D.; Agarwal, V., and Shuttleworth, T.P.: Randomized Controlled Trial of Complete Bed Rest versus Ambulation in Management of Proteinuric Hypertension During Pregnancy, Br. J. Obstet. Gynecol. 89:128, 1982

13 Chesley, L.C.: Hypertensive Disorders in Pregnancy, New York, Appleton-Century-Crofts, 1978, pp. 123-155.

14 Sagen, N.; Koller, O., and Haram, K.: Haemoconcentration in Severe Preeclampsia, Br. J. Obstet. Gynecol. 89:802-805, 1982.

15. Pritchard, J.A.; Cunningham, F.G., and Mason, R.A.: Coagulation Changes in Eclampsia: Frequency and Pathogenesis, Am. J. Obstet. Gynecol. 124:855, 1976

16 Schifrin, B.S.; Foye, G., and Amato, J., et al: Routine Fetal Heart Rate Monitoring in Antepartum Period, Obstet. Gynecol. 54.21-25, 1979.

17. Freeman, R.K.; Goebeisman, U., and Nochimson, D., et al: Evaluation of Significance of Positive Oxytocin Challenge Test, Obstet. Gynecol. 47.8-13, 1976

18 Chesley, L.C.: Parenteral Magnesium Sulfate and Distribution, Plasma Levels, and Excretion of Magnesium, Am. J. Obstet. Gynecol. 133:1-7, 1979.

19 Pritchard, A.J.: Standardized Treatment of 154 Consecutive Cases of Eclampsia, Am. J. Obstet. Gynecol. 123:543, 1975.

20. Pritchard, A.J.: Management of Severe Preeclampsia and Eclampsia, Seminars in Perinatology 2:83-97, 1978

21 Borges, L.F. and Gucer, G.: Effect of Magnesium on Epileptic Focal, Epilepsia 19:81-101, 1978

22 Sibai, B.; Spinnato, J.A., and Watson, D.L., et al: Effect of Magnesium Sulfate Upon Electroencepbalograpbic Findings in Preeclampsia-Eclampsia (unpublished data).

23. Young, B. and Weinstein, M.H.: Effects of Magnesium Sulfate on Toxemic Patients in Labor, Obstet. Gynecol. 49:681-684, 1977

24 Skaredoff, M.N.; Roaf, E.R., and Sanjay, D.: Hypermagnesaemia and Anaestbetic Management, Can. Anaesth. 29.35-40, 1982.

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Perinatal infections

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ABSTRACT: The concern of the obstetrician for infections acquired during pregnancy is their effect on current and future pregnancies. Their importance is not only in congenital disease but the magnitude of handicaps in infancy and childhood where neurological abnormalities predominate in almost every pathogen. Reduction of this mortality/morbidity is frustrated by a lack of full understanding of viruses, replication, transmission to the fetus, sexual transmission, and susceptibility to drugs. This frustration includes bacterial pathogens where recurrences after appropriate antibiotic therapy or drug resistance thwarts efforts to avoid neonatal disease.

Such situations impose an irreducible minimum of perinatal disease which to the parents of the infected infant is unacceptable. For these reasons development of vaccines against viruses, antibiotics and antiviral drugs for acute and recurrent illness, and repetitive prenatal screening should be pursued vigorously. Immunological differences between sexual partners in whom only one shows disease may point a direction of therapy. Rapid, specific diagnostic tests and controlled laboratory standards should facilitate differential diagnosis of nonspecific clinical presentations.

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In recent years, major advances in microbiologic techniques have identified the role of bacteria and viruses in abortions, congenital abnormalities, prematurity, respiratory distress syndromes, hemolytic and neurological disease of the newborn and fetal death.[1-3] Perinatal infections, although still rare, command continued vigilance to minimize the maternal and fetal risks. This is particularly true since treatment-cure lags far behind diagnosis especially in viral infections where prevention from exposure is our best recourse. Vigilance for infection must not only be confined to the perinatal period but should begin in early pregnancy where abortions or severe congenital malformations may ensue and extend into childhood where the pediatrician may encounter delayed manifestations in the form of learning disabilities, neurologic and auditory deficits. Such an expanse of vigilance, therefore, involves the gynecologist, obstetrician, neonatologist, and pediatrician in a team of concept of care to the pregnant patient and the offspring.

Principles of perinatal infection • It is important to emphasize that infection is not the same as disease. The presence of beta-hemolytic streptococcus colonies in the vagina does not indicate disease, in fact, only one in ten such patients will have symptoms and signs of streptococcal invasion. Cytomegalic viruria is often present without discernible symptoms. Recognizable illness is also influenced by the gestational age, route of infection, and susceptibility of various tissues to different organisms.

Prior to differentiation, that is, in the preimplantation period, the early embryo is refractory to teratogens. Once organogenesis is underway, malformations of individual organs pinpoint the time of

the invasion and tissue specificity of the pathogen. For example, acute rubella results in a 50% chance of severe congenital malformations (cardiac, ophthalmic, neurologic, reticuloendothelial) if it occurs in the first month of pregnancy, 25% in the second month, 10% in the third and approximately 5-6% thereafter.[4] Later infections, however, may result in the "expanded rubella syndrome" of decreased growth, neurologic, immunologic abnormalities.[4] Delayed syndromes are commonly found in toxoplasmosis and diagnosis may occur only in infancy. Congenital syphilis follows trophoblastic invasion occurring in the second trimester in untreated patients.

Sonography and amniocentesis have been particularly useful to the perinatologist in diagnosis of viral disease in pregnancy. Sonographic detection of fetal abnormalities may be the first impression that viral infection has occurred. Hydrocephaly, microcephaly, atrophy of brain tissue, open neural tube defects, and symmetrical intrauterine growth retardation syndromes are among the possible viral abnormalities which sonar detects. Viral and bacterial cultures and gram staining of amniotic fluid often verify the diagnosis.

Routes of invasion determine the type of fetal disease. Pathogens may be transmitted to the fetus via maternal blood or by direct contact with the infant or by ascending infection.[3] Rubella, toxoplasmosis, herpes, syphilis, and tuberculosis often disseminate through the maternal bloodstream, invade or cross the placental barriers to produce congenital anomalies. Some of these pathogens are present in the genital tract and direct contact with the fetus during birth exposes the neonate to either disseminated disease (herpesvirus, Group B streptococcus) or localized disease as ophthalmia neonatorum (gonococcus, chlamydia) and laryngeal warts (condyloma virus). Ascending infection usually results as organisms pass through ruptured fetal membranes.

Finally, disease with mild symptomatology may not be recognizable at the time of infection and may only be diagnosed by the immune response which results in the persistence of antibodies.

Microbiology and immunology involve appropriate use of methods for detection, identification and quantitation of organisms and humoral and cellular responses generated by host-invader interaction: These include:

1. Histology of Infected Tissue — Cytopathic effects (nonspecific) or inclusion bodies, e.g. herpes in Pap smear (multinucleated giant cells) can be demonstrated by light microscopy but is of limited diagnostic value except to generalize viral invasion of placental villi. Electron microscopy is more specific, e.g. hepatitis virus, cytomegalic virus, herpes.
2. Tissue Culture and Animal Innoculations — Special cell lines are used to culture and identify specific viruses. These techniques need more time than may be available to the obstetrician managing the laboring patient suspected of herpes.
3. Antibody Detection — Antibody-antigen reactions have given rise to a generation of tests which have proven valuable in diagnosis of prenatal infection.

 a. Serodiagnostic Tests — Hemagglutination (HA) or hemagglutination inhibition tests (HAI), complement fixation (CF), and virus neutralization are commonly used tests. HA, HAI, and CF are available to most physicians and require paired sera from acute and convalescent phases which show a four-fold increase in antibodies for diagnosis of acute disease. A single seropositive specimen indicates past exposure to an infection without regard for time of occurrence of the initial insult. HA and HAI detects both IgG and IgM antibodies in rubella, herpesvirus, and cytomegalic virus. IgG usually persistently crosses the placental barrier and detection in the neonate often occurs. It also confers "lifelong" maternal immunity in most infections. IgM, on the other hand, remains positive for only 60-80[1,3,5] days before tests become negative and is not transferred across the placenta. IgM specific antibody test allows us to determine infection in the mother within that time frame. If IgM antibodies are present in the newborn, they are most likely produced by the infant in response to fetal disease and cord blood levels greater than 20 mg/100 ml[1] are significant. Complement fixation is more important in rubcola, mumps, enteroviruses, and treponema.

 Viral neutralization measures the degree of inhibition of viral growth in tissue monolayers with the addition of serum containing suspected antibodies to that virus. One form of viral neutralization is fluorescent treponema immobilization (FTI) used for diagnosis of syphilis.

 The reliability of all serodiagnostic tests depends heavily upon known positive and negative controls and the addition of a specific indicator system to determine antigen-antibody reaction.

 b. Immunological tests — Radioimmunoassay (RAI), immunofluorescence (IF), and enzyme-linked immunoabsorbant assay (ELISA) are 100 to 1000-fold more sensitive than serodiagnostic tests in providing detection of

virus specific antibodies.[3] In these circumstances, suspected sera containing antibody are incubated with known antigen and then by adding a test antiglobulin conjugated to an indicator specific binding can be determined. Usually the indicator is a radioisotope,[6] fluorescence[7] or an enzyme.[8] Quantitation is then accomplished by color intensity or by dilution. These tests have proven highly effective in diagnosis of rubella, toxoplasmosis, herpes, and CMV infection. The ELISA test, highly regarded, has been employed not only for detection of antibody but of antigen (viral particles) by simply reversing the process, i.e. suspicious viral particles are tested against known antibodies.

Commercial kits are now in regular use in laboratories throughout the United States for both immunological or serodiagnostic tests. However, recent auditing of laboratories by the National Institutes of Health indicated that of the laboratories tested 64-67% reported unreliable results to toxoplasma test sera.[9] Since many commercial kits proved also unreliable, the Institute recommended that physicians should use only reference laboratories.[9]

Bacterial infection, by contrast with viral infections, has seen satisfactory advances of both diagnosis and treatment. Prenatal diagnosis for syphilis and gonorrhea (GC) using standard darkfield smears from genital lesions, serological surveillance of antibodies to syphilis, and GC culture in chocolate agar media has allowed both conditions to be diagnosed and effectively cured by appropriate antibiotics, thus reducing their impact on perinatal disease. Courses of antibiotics are detailed elsewhere.[10]

Surveillance for gonococcus should be repeated at approximately 36-38 weeks gestation to detect reinfection and avoid fetal disease. The treponemal antigen, generically detected by the VDRL test or more specifically by the fluorescent treponemal antibody test (FTA), the FTA absorption test, or FTI, is measured in dilutions and should be serially determined after treatment to ensure that the titers are decreasing as an indication of cure. Rising titers may indicate inadequate treatment or reinfection.

Specific infections • The important viral and bacterial infections in perinatology are summarized in Tables 1 and 2. Extensive and detailed documentation of this information is already in overabundance in the medical literature and it is not the purpose here to repeat these details but to concentrate on new "updates" on some of these infections.

Cytomegalic virus (CMV): Cytomegalic virus is seen in about 3% of pregnancies and 1-2% of newborns are infected at birth.[1-3] Detection is best accomplished by virus isolation from the cervix, semen. Almost all women are asymptomatic and it is difficult to determine when the carrier mother becomes reactivated. Congenital disease may be diagnosed only after the event and delayed syndromes predominately neurological deficits and persistent viruria are common occurrences.[1-3] Mothers with positive serology, IgM specific-CMV antibodies or who had a previously affected infant, subsequently deliver unaffected infants with viruria. Other sources of neonatal CMV infections include blood transfusion and breast milk. The incidence of virus in breast milk ranges between 16% in asymptomatic mothers to 68% in congenital CMV. Although CMV can be eliminated by heating the milk at 62C, many milk banks prefer to preserve the milk's immunological functions and store without heating or boiling.[11] Serodiagnosis must be established in mothers contributing to such milk banks.

Treatment has not been successful and prevention at present involves detection of susceptible women by antibody tests and avoidance of high risk exposure areas while pregnant. Hospital personnel in newborn nurseries and delivery rooms must be considered at high risk. Vaccines are currently being tested.

Condyloma acuminatum: Known as venereal warts, papillomatous excrescences on the vulva, perineum, vagina, or cervix are caused by the papilloma virus (Group A paponavirus) and is transmitted to the infant as its descends through the birth canal. Genital and laryngeal warts develop in infants following vaginal delivery and cesarean section may well be indicated to prevent transmission. However, abdominal delivery is only presently indicated for soft tissue dystocia caused by the tumors.

Treatment in pregnancy is usually conservative and consists of keeping the area as dry, clean, and using antibacterial creams for associated vaginal discharges. In selected cases cryosurgery, electrocautery, or laser surgery may be more desirable than treatment with podophyllin resin or 5-fluorouracil.[1-3] Fatal fetal toxicity has been reported with podophyllin while the antimitotic activity of 5-fluorouracil may make it theoretically teratogenic. Active treatment and cure is best pursued after delivery.

Hepatitis B (HBV): Hepatitis B virus is a blood borne pathogen which can be transmitted to the fetus particularly if the infection develops near to term, when approximately 60% of fetuses are affected. Antigenemia is usually detected by testing for hepatitis B surface antigen (HBsAg), but core antigen (HBcAg), or filament antigen (HBeAg), which are detectable after HBsAg, confirms infectivity,[3,12] HBsAg has been recovered in transfusion blood and blood products, breast milk,[13,14] semen, saliva,[15] menstrual effluent and lochia.

TABLE 1.—Human Perinatal Viral Infections.

Maternal Virus	Fetal or Newborn Effect
Condyloma acuminata (Papillomavirus, or Group A Papovavirus)	Laryngeal warts
Coxsackie B virus	Meningoencephalitis, myocarditis, and hepatitis
Cytomegalovirus	Viruria, hepatosplenomegaly, hepatitis, occasionally transient thrombocytopenia, microcephaly, chorioretinitis, intracerebral calcifications, deafness, visual deficits, portal fibrosis, and mental retardation.
Hepatitis B	Hepatitis
Herpex simplex	Nonfatal predominantly cuntaneous infection, generalized herpes, encephalitis, fulminating disseminated visceral disease, mental retardation, microcephaly with intracranial calcifications, dysphasia, microphthalmos, and neurological deficits
Influenza	Various malformations
Mumps	Fetal death, various malformations, and possible endocardial fibroelastosis
Poliomyelitis	Abortion, "Rag-doll syndrome," spinal or bulbar poliomyelitis
Rabies	Unknown in humans.
Rubella	Abortion, "blueberry-muffin babies," malformations (microcephaly, cataracts, chorioretinitis, deafness, heart defects) thrombocytopenia, hemolytic anemia, hepatosplenomegaly, pneumonitis, hepatitis, osteomyelitis, encephalitis, mental retardation
Rubeola	Abortion and stillbirth, congenital measles
Vaccinia	Abortion, clinical vaccinia
Varicella-Zoster	Abortion, stillbirth, prematurity, chickenpox, or shingles
Variola	Abortion, stillbirth, and clinical smallpox
Western equine encephalitis	Encephalitis

TABLE 2.—Perinatal Infection Syndromes - Bacterial, Nonbacterial.

Maternal Organism	Fetal or Newborn Effect
Gonococcal	Opthalmia neonatorum, oropharyngitis
Syphilis	Stillbirths, congenital syphilis - nasal discharge, iritis, meningitis, osteochondritis, periostitis, mucocutaneous vesicles, anemia, jaundice, thrombocytopenia
Group B Streptococcus	Septicemia, meningitis, pneumonitis, persistent fetal circulation, respiratory distress syndrome
Chlamydia trachomatis	Opthalmia neonatorum, pneumonia syndrome, prematurity
Mycoplasma	Pneumonia, stillbirths
Listeriosis Listeria monocytogenes)	Abortions, stillbirths, liver and splenic, microabscesses
Toxoplasmosis	Microcephaly, microphthalmia, hydrocephalus chorioretinitis, mental retardation, convulsions, jaundice, hepatosplenomegaly, pneumonitis, stillbirths, abortions
Chorioamnionitis (Multiple Organisms)	Various infections localized or disseminated, persistent fetal circulation, hematological disturbances, meningitis.

Chronic antigenemia or maternal carriers occurs in about 10% of patients and transmission frequency to offspring in successive pregnancies ranges from 5-13%.[3,16] These infected infants become asymptomatic carriers of HBV and serum transaminase levels are elevated for up to 3-4 months of age even though less than 10% develop icteric hepatitis.

Seroconversion and prevention of neonatal hepatitis can be accomplished by passive immunization with hepatitis B immune globulin (HBIG).[16] The recommended dosage schedule is 0.5 ml/kg within 48 hours of birth then 0.16 ml/kg monthly for six months. HBIG should also be given to women at risk. An inactivated hepatitis B vaccine (Heptavax-B) approved for high risk patients produces 85-90% immunity against hepatitis B[17,18] and its use may also reduce the high incidence of hepatoma seen in chronic hepatitis of HBV.

Medical and nursing personnel who are exposed to infected mothers at delivery, in the puerperium and at menstruation should be vaccinated.[18] Precautionary measures cannot be overstressed. Disposal of maternal effluent, conception products, eating utensils, and delivery instruments should be assiduously performed with disposable gloves and gowns being worn in all procedures.

Herpesvirus (HSV): Herpesvirus has been the focus of inordinate attention by both the press and medical professions, no doubt because of the rapid increase in incidence among the young, estimated at 300,000 new cases per year. Unfortunately that attention has generated devastating emotional and psychological gloom in new patients. Anger, guilt fear, and deep depression is turned on themselves, their partners, and even their doctors, because of the social stigma attached to HSV. Depression in 84%, sexual dysfunction in 35%, isolation 70%, rejection by sexual partner in 21% were reported in an survey of 4,000 herpes patients.[19]

Unwittingly, the medical profession may have fostered these problems by failing to assert that this disease, although not presently curable, is consistent with normal activities with restrictions during recurrences and caution during pregnancy. Such restrictions are no different in concept from those, for example, of diabetics who cannot indulge in sweets. The acquisition of genital herpes does not

doom the patient as a social outcast. Patience and detailed counselling will support her through the emotional crisis. Perhaps, also we must attack the press for its sensationalism.

Herpes simplex, types 1 and 2, are the pathogens which predominately infect oral and genital mucosal areas respectively. Cross-infections have been described.[20] Acute infection followed by remissions and recurrence of single or clusters of vesicles is characteristic. However in 14% of pregnant patients viral shedding continues after healing and persists for 6-10 days in primary infection and 1-13 days in recurrent infection. Replication of the virus occurs in nerve ganglia. The virus has proven hardy and innocula survives for 1-72 hours on various fomite materials, e.g. plastic specula — 18 hours, in jacuzzis — 3-4 hours.[21]

The principal importance of herpes in perinatology is the potential role as a devastating pathogen. However, fewer than 1% of all pregnant mothers harbor the herpesvirus.[3] In primary disease, congenital disease from transplacental passage of the virus at approximately 24% may, in fact, be inaccurate as it is difficult to determine whether recovered virus is from genital tract or abortus.[1] In recurrent disease, however, intrauterine invasion is rare and neonatal disease approximately 20% occurs from direct fetal contact with open lesions or viral shedding in vaginal delivery. Ensuing disseminated disease causes death in 80-90% of infants, and severe sequelae in nearly 10%, while localized leads to fetal death in 40-60%, severe sequelae in 20% and no observable deficit in 20%.[1,22,35] Seventy percent of infected neonates may be asymptomatic at birth[23] or born to asymptomatic mothers.[24] Fetal scalp electrodes have inoculated the fetus.[25]

Cesarean section as a therapeutic maneuver has influenced but it does not exclude the possibility of neonatal infection in recurrent disease. Infection reported as close to 50% in vaginal delivery is less than 10% with cesarean section. This also does not imply as part of the "doom picture", that the patient is condemned to abdominal deliveries. Cervical and vaginal cultures at weekly intervals obtained in the last four weeks of pregnancy can reduce the need for cesarean section without unnecessary risk to the fetus.[26] If two cultures are negative within seven days of labor and there are no active lesions, vaginal delivery may be safe.

For patients in labor, future directions indicate that the presence of the virus may be detected by combining Papanicolaou smear with the ELISA test. An accurate result available within a few hours whould shorten the time necessitated by the best culture methods (minimum three days). If these are unavailable and recurrences of HSV recent, abdominal delivery would be prudent.

Cesarean section has also been recommended if the membranes have been ruptured for no more than four, probably even up to 12 hours in the presence of lesions. However, since vaginal delivery will bring the fetus in direct contact with open lesions thereby increasing fetal risk, abdominal delivery has been recommended for all these patients irrespective of duration of ruptured membranes.[3]

Antiviral therapy has not been successful in treatment of H. simplex. Iododeoxyuridine (IUDR) cytosine arabinoside (ARA-C) adenosine arabinoside (ACA-A) have not fulfilled their promise.[3] Acyclovir decreases recurrences and numbers of lesions, reduces viral shedding by half but its safety in pregnancy presently is not fully established. Vaccines presently under trial at the Universities of Chicago and Washington and in England have shown promise. A number of local remedies have been applied but keeping the lesions dry, cool and improving personal hygiene have proven just as effective.

Rubella: In the United States, about 10-15% of pregnant women are susceptible to rubella.[3] These women do not have natural infection and have not been immunized. All women should therefore be tested for antibody and immunized when not pregnant. The standard HI test has proven very reliable, with false positive of approximately 5%. Low titered sera should be retested.

The RA 27/3 vaccine gives a higher antibody response which lasts longer than does the vaccine HPV77 and Cendehill. The latter two, discontinued in 1979, have been associated with fetal disease in approximately 3-5% of pregnancies.[2,3] Women who received vaccinations were counseled not to become pregnant for at least three months because of transplacental transmission of the attenuated virus. Recent studies from the Centers for Disease Control, Atlanta, reported no adverse fetal effects in 92 pregnancies of patients who received the RA 27/3 inadvertently during pregnancy or in whom unplanned pregnancy occurred within 12 weeks of receiving the vaccine.[27] This makes the recommendation of continuation of pregnancy acceptable, particularly since RA 27/3 is the only vaccine now used in the United States.

Toxoplasmosis • Toxoplasmosis occurs in 0.2-0.5% of gestations in the United States. Fetal transmission is generally reported at 15% in first trimester, 25% in second and 60-65%[28,29] in the third, but the severity of the congenital abnormality is inversely reltaed to the gestation.[28,29] Severe congenital infection occurs in 60% of first trimester infection while in the third trimester the infection is subclinical in 92% and usually results in delayed syndromes after birth.[29]

This infection presents some difficult problems.

Neither maternal nor neonatal disease, unless severe, can be recognized with clinical certainty. Infant disease may show as late as two years after birth,[1] and serological diagnosis is of questionable accuracy in our laboratories. Amniocentesis may be necessary to isolate the organisms and detect antibodies. Drug therapy is still unsatisfactory with sulfonamides, pyrimethamine, and spiramycin having relative contraindications in pregnancy. Fortunately, acute infection confers immunity on successive pregnancies. Sonography is useful in detecting hydrocephaly, cerebral atrophy and growth retardation.

Transmission of the organism from the feces of cats, via rodents, and through raw or undercooked meat can be prevented. Refrigeration of raw meat and adequate cooking will kill the organism and the cats should be tested and treated adequately.

Group B streptococcus (B hemolytic streptococcus): The resurgence of Group B hemolytic streptococcus (GBS) as a major perinatal pathogen continues to be the enigma of the obstetrician. Colonization rates 5-29% in vaginal flora of mothers and of infants are associated with only 1% neonatal disease.[30,31] Thus screening poses logistical and economic problems. Even so, treatment to eradicate the pathogen is often followed by recurrences and raises questions about the most appropriate time for treatment.[32] Prophylaxis has not been successful.[30] Occasionally GBS infection of the neonate occurs from the nursery environment.

In order to prevent neonatal sepsis, persistent fetal circulation, respiratory distress syndromes and high fetal mortality (14%-71% of infected infants)[31] seen in neonatal diseases, high risk groups must be identified, screened and treated. Premature infants are especially vulnerable to Group B streptococcus, therefore, in any pregnancy in which premature delivery is likely to occur screening for GBS is highly recommended. Other at risk infants are those following a previously infected infant and undiagnosed neonatal sepsis, or unexplained stillborns. In positive GBS mothers intrapartum administration of ampicillin has been effective in preventing transmission of GBS.[33]

Many other organisms, e.g. listeria, chlamydia, GBS, have been implicated in prematurity and neonatal sepsis. The possibility of infection precipitating labor should therefore be considered before tocolytic drugs are administered to prevent labor, even though this role has not been carefully established. These organisms may also be important in delayed, postpartum endometritis where illness may occur one to six weeks after delivery. Diagnosis and culture of these organisms require special laboratory facilities and techniques for specimen collection.

Future research must provide details of viral replication, and also rapid, reliable and inexpensive screening tests available to all physicians confronted with perinatal infection. The rapid "C" test for GC is one such test being developed. Future research must provide details of immunocompetence of affected and unaffected patients especially where they are sexual partners. HLA antibodies and "killer" cells appear to be incompetent in the affected.[34] Only then can there be a solid basis on which to develop immuno- and chemotherapy.

References

1. Morison, J.E.: Perinatal Infections, Obstetrics and Gynecology Annual, Editor Ralph M. Wynn, Apple-Century Crofts, pg. 147, 1979.
2. Sever, J.L.; Larsen Jr., J.W., and Grossman III, J.H.: Handbook of Perinatal Infections, Little-Brown and Co., Boston, 1979.
3. Grossman III, J.H.: Viral Infections in Obstetrics and Gynecology. Obstetrics and Gynecology Annual: Editor Ralph M. Wynn, Apple-Century Crofts, pg. 55, 1980.
4. Grossman III, J.H.: Viral Infections During Pregnancy, J.C.E. OB/GYN, 21, 11, May 1979.
5. Leidel, J.: Appearance and Persistence of Rubella-Specific IgM Antibodies, Dtsch. Med. Wachenschr, 102:1418, 1977.
6. Forghani, B.; Schmidt, N.J., and Lennette, E.H.: Solid Phase Radioimmunoassay for Typing Herpes Simplex Viral Antibodies in Human Sera, J. Clin. Microbiol. 2:410, 1975.
7. Bitts, R.D.; George, S.D., and Rundell, B.B.: Comparative Activity of Immunofluorrescent Antibody and Complement-Fixing Antibody in Cytomegalovirus Infection, J. Clin. Microbiol. 4:151, 1976.
8. Gerna, G.; McCloud, C.J., and Chambers, R.W.: Immunoperoxidase Technique for Detection of Antibodies to Human Cytomegaloviruses. J. Clin. Microbiol. 3:364, 1976.
9. Sever, J.L.: Use of Torch Serology, "Topics in Maternal Fetal Medicine," Snowmass, Colorado, July 1980.
10. Sexually Transmitted Diseases, Treatment Guideline 1982, MMWR 31, 35S Suppl., Aug. 20, 1982.
11. Dworsky, M.: Breast Milk Remains Infected With CMV During Storage, STD Bull. 2,11 — Apr. 1982.
12. Gerety, R.J., and Schwertzer, I.L.: Viral Hepatitis Type B During Pregnancy, Neonatal Period and Infancy. J. Pediatr. 90:368, 1977.
13. Boxall, E.H.; Flewett, T.H., and Dane, D.S., et al: Hepatitis B Surface Antigen in Breast Milk, Lancet 2:1007, 1974.
14. Linnemann, C.C., and Goldberg, S.: HB Antigen in Breast Milk, Lancet 2:155, 1974.
15. Heathacote, J.; Cameron, C.H., and Dane, D.S.: Hepatitis B Antigen in Saliva, Semen, Lancet 1:71, 1974.
16. Dosik, H., and Jhaveri, R.: Prevention of Neonatal Hepatitis B Infection by High Dose Hepatitis B Immunoglobulin, N. Engl. J. Med. 298:6027, 1978.
17. Francis, D.P.; Hadler, S.C., and Sumner, E. et al: Prevention of Hepatitis B with Vaccine, Ann. Int. Med. 97:362, (Sept.) 1982.
18. Hepatitis B Vaccine for Use in Selected Populations, FDA Drug Bull. 5, Apr. 1982.
19. Knox, S.: Survey of Patients: High Incidence of Depression and Sexual Dysfunction in Herpes, STD Bull. 2,3 — Feb. 1982.
20. Nahmias, A.J.; Dowdle, W.R., and Josey, W.E.: Newborn Infection with Herpes Virus Hominis Type 1 and 2, J. Ped. 75;1194, (Dec.) 1969.
21. Larson, T.: Viral Innocula Remain Viable on Fomite Materials, STD. Bull. 2,12 — Oct. 1982.
22. Nahmias, A.J.; Visintime, A.M., and Reimer, C.B.: Herpes Simplex Virus Infection of the Fetus and Newborn: In Krugman, S., Gershon, A., eds.: Infections of Fetus and Newborn Infant, New York Liss. pp. 63, 1975.
23. Arvin, A.M.; Yeager, A.S.; Bruhn, F.W., and Grossman, M.: Neonatal Herpes Simplex Infection in Absence of Mucocutaneous Lesion, J. Ped. 100:715, (May) 1982.
24. Vontver, L.A.: Herpes: Managing Pregnancies, STD Bull. 2, 2 — Aug. 1982.
25. Goldkrand, J.W.: Intrapartum Inoculation of Herpes Simplex Virus by Fetal Scalp Electrode, Obstet. Gynecol. 59:263, 1982.
26. Grossman III, J.H.; Wallen, W.C., and Sever, J.L.: Management of Genital Herpes Simplex Virus Infection During Pregnancy, Obstet. Gynecol. 58:1, 1981.
27. Preblud, S.L.; Stetler, H.C.; Frank, J.A.; Greaves, W.L.; Hinman, A.R., and Herrman, K.L.: Fetal Risk Associated with Rubella Vaccine, JAMA 246:1413, — 1981.

28. Desmonts, G , and Couvreur, J.: Congenital Toxoplasmosis. Prospective Study of 378 Pregnancies, N. Engl. J. Med. 290:1110, 1974.
29 Desmonts, G., and Couvreur, J : Toxoplasmosis in Pregnancy and Its Transmission to Fetus, Bull. N Y. Acad Med 50:146, 1974.
30. Baker, C.J. and Barrett, F.F : Transmission of Group B Streptococcus Among Parturient Women and Their Neonates, Paediatrics 83:919, 1973.
31 Bobbitt, J R.: Group B Streptococcal Neonatal Infection, Contemporary Ob-Gyn 15:119, (Jan) 1980.
32. Gardner, S E., Yow, M D.; Leeds, L.J.; Thompson, P.K.; Mason, E.C., and Clarke, D.J.: Failure of Penicillin to Eradicate Group B Streptococcal Colonization in Pregnant Woman, Am. J. Obstet. Gynecol. 135:1062 — 1979.
33 Yow, M D.; Mason, E C., and Leeds, L.J., et al: Ampicillin Prevents Intra-Partum Transmission of Group B Streptococcus, JAMA 241:1245, 1979.
34. Lopez, C.: Natural-Killer-Cells May Be Key to HSV Resistance, STD Bull. 2, 4 — Apr. 1982.
35. Sever, J L.: Infections in Late Pregnancy, "Topics in Maternal-Fetal Medicine." Snowmass, Colorado, July 1981.

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Noninsulin dependent gestational diabetes mellitus: diagnosis, management and outcome

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ABSTRACT: Pregnant women identified as at risk for gestational diabetes should be screened. Diagnosis of abnormal carbohydrate metabolism is based on different criteria than in the nonpregnant state because of physiologic pregnancy changes. Control and careful evaluation of the maternal environment should decrease the neonatal risks of macrosomia, hypoglycemia and hyperbilirubinemia. Women predisposed to gestational diabetes are also at increased risk of morbidity due to associated medical-obstetrical complications.

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During pregnancy numerous physiologic adaptations are induced by the hormonal changes associated with gestation. Among these are hyperinsulinemia and a lowering of fasting, postprandial and mean blood glucoses. The latter occur early before facilitated transfer of glucose across the placenta and should be sufficient to result in a relative decrease in glucose. Women with normal pancreatic function will meet the challenges of pregnancy by increasing their production and secretion of insulin, maintaining normal glucose homeostasis. Those who have marginal pancreatic reserve or in whom there is a defect in utilization of insulin at the peripheral level may first manifest clinical diabetes during pregnancy which usually disappears postpartum. Undetected derangement of carbohydrate metabolism in pregnancy may lead to abnormal and even fatal consequences for the fetus. Therefore, the testing of tolerance to glucose is of paramount importance in patients who are at risk for the development of diabetes during pregnancy.

This article will discuss diagnosis, management and neonatal outcome of noninsulin dependent diabetes in pregnant patients at the University of Miami Jackson Memorial Hospital.

Material and methods •Table 1 lists the criteria used to screen for diabetes. Patients meeting these criteria have an oral glucose test (O-GTT) between 24 and 28 weeks. This is repeated at 30-32 weeks if the initial test is negative. If any two of the values listed in Table 2 are met or exceeded, the patient is tentatively called diabetic. A repeat fasting (FBS) and two hour postprandial (2 hr. P-P) glucose on a regular diet are then done to confirm the glucose tolerance test.

Table I.—Diabetes Mellitus - Gestational.

Screening Criteria

A Past History of Infants with
- 1 Macrosomia (>4000 gm/9 lbs)
- 2 Unexplained Perinatal Mortality
- 3. Recurrent Prematurity
- 4 Recurrent Pregnancy Wastage
- 5 Congenital Anomaly

B Past History
- 1 Gestational Diabetes
- 2. Familial Diabetes

C. Present History or Findings
- 1. Age 35 Plus
- 2 Grand Multiparity
- 3 Obesity
- 4 Excessive Weight Gain
- 5 Polyhydramnios
- 6 Glucosuria
- 7. Hypertensive disorders

Tables 2.—Oral Glucose Tolerance Test.*

Fasting	1-Hour	2-Hour	3-Hour
90	165	145	125

* Whole Blood

TABLE 3.—Antepartum Monitoring.

1. Fetal Movement Chart
2. Serial Sonography
3. Serial Estriols
4. Nonstress Tests
5. Contraction Stress Tests

Noninsulin dependent diabetics are those who have two abnormal values in the O-GTT not including the FBS and who, on repeat FBS and two hour P-P, have a normal fasting (below 90 mg/dl.) and two hour P-P which is normal or elevated.

Treatment is a diabetic diet (30 cal/kg) planned so that the patient receives 200-250 gm COH, 1.5 gm/kg protein, and remainder of calories as fats. Meals are divided into three meals plus three snacks per day, (midmorning, midafternoon and bedtime).

Diabetic control is followed by weekly FBS and two hour P-P sugars. As long as the fasting remains below 90 mg/dl and the two hour P-P below 120 mg/dl on diet alone, the patient is classified as a noninsulin dependent diabetic, also known as a Whites Class A.

During pregnancy, patients are expected to gain 20-27 pounds regardless of prepregnancy weight. The usual routine prenatal examinations are done weekly to every other week until 28-30 weeks, and weekly thereafter. If weight gain is insufficient, the patient is taught to check her urine for ketones four times daily premeal. Ketonuria without glucosuria is an indication of starvation and calories are increased. At 30 weeks patients are instructed to start recording fetal movements once daily for 30 minutes. This is increased gradually so that by 37 weeks fetal movement counts are done four times daily for 30 minutes each time. Baseline ultrasound for congenital anomalities and gestational age is done as soon as the diagnosis is made and repeated at six-week intervals to detect abnormalities in growth. Serial serum estriols are generally done starting at 37 weeks twice weekly until 40 weeks, then daily thereafter. Weekly nonstress testing (NST) starts at 35-37 weeks. A contraction stress test is done if the nonstress test is nonreactive (Table 3). All noninsulin dependent diabetics are admitted at term if undelivered and followed with daily estriols, twice weekly NST's, and daily fetal movement charts. They also have blood glucose measurements done four times daily, twice per week (FBS 11:00 a.m., 4:00 p.m. and 10:00-10:30 p.m.). Control is based on a fasting below 90 mg/dl and all others below 120 mg/dl.

Indications for earlier admission include any obstetrical complication, eg. preeclampsia, hypertension, infection, and bleeding. If sugars begin to climb above previously mentioned target values before 37 weeks, insulin therapy is instituted and classification changes to Class B, based upon White's criteria. After 37 weeks, however, if fetal lungs are mature and the cervix is inducible, and induction is performed. Otherwise inductions are generally not done unles obstetrically indicated. If the cervix is ripe at term, this can be considered once fetal lung maturity is established. During labor blood sugars are checked

every four hours with the Dextrometer. The aim is to maintain levels between 60 and 100 mg/dl but not above 120 mg/dl. Fluids in labor are usually 5% D/.45 NSS at 100-150 cc/hour. Urines are checked regularly to detect starvation ketosis in which case IV fluids are increased. Labor is aggressively managed. It is expected that patients should be in the active phase within six hours of onset. Membranes are ruptured as soon as labor is suspected or at the outset of an induction and pitocin stimulation instituted. If after six hours of good regular contractions every three minutes, they are not entering the active phase, a cesarean section is performed. The indication is either failed induction if no progress has occurred or inadequate/failed progress if some but insufficient cervical changes occurred.

If the infant is thought to be above 9-9½ pounds, consideration is given to cesarean section to prevent shoulder dystocia. All abnormal presentations undergo cesarean section.

Results • From March 26, 1978 through May 4, 1982, 193 noninsulin dependent diabetics conceived 196 fetuses (three sets twins). Two pregnancies resulted in spontaneous abortions before 20 weeks.

In the remaining 194 babies, there were two stillbirths. One occurred at 24 weeks in a mother who had mild chronic hypertension untreated; the other at term as a result of a true knot in the cord. There were two neonatal deaths, one as a result of multiple congenital anomalities in a growth retarded infant delivered spontaneously at 37 weeks. The other death was an immature infant who delivered at 23 weeks, despite tocolysis. Chorioamnionitis was noted at delivery. Therefore the overall uncorrected perinatal mortality rate was 20.6/1000 or 2.06% (Table 4).

TABLE 4.—Diabetes Mellitus, Noninsulin Dependent, - Class A.

Mothers	193
Spontaneous abortions	2
Babies	194
Twins	3 sets
Stillborns	2
Chronic hypertension 24 weeks	
True cord knot 40 weeks	
Neonatal deaths	2
Congenital anomalies	1
Immature delivery 23 weeks	1

Perinatal Mortality Rate 20.6/1000 (2.06%)

The vast majority of patients went into spontaneous labor. Inductions were performed in eight; three with preeclampsia, one each with premature rupture of membranes at 34-35 weeks and chronic fetal distress at term, and three were elective at 40-41 weeks. The latter three and one preeclamptic patient underwent cesarean section for failed induction for a failure rate of 50%.

There were a total of 63 cesarean sections of which 38 were primary. The cesarean section rate was 32.5%. Major indications were secondary arrest and/or inadequate progress (26.3%), cephalopelvic disproportion (21.1%), fetal distress and breech presentation (15.8% each) and repeat procedures (12.9%) (Table 5).

TABLE 5.—Diabetes Mellitus, Noninsulin Dependent. Cesarean Sections

		Rates
Total Mothers	193	
Babies	194	
Cesareans	63	32.5
Primary	38	19.6
CPD > 4000 gm	6	
< 4000 gm	2	
Secondary arrest	10	
Fetal distress	6	
Breech	6	
Failed induction	4	
Others	4	
Repeat	25	12.9

TABLE 6.—Medical-Obstetrical Problems.

Obesity	14
Chronic Hypertension	11
Preeclampsia	8
Hydramnios	4
Premature rupture membranes	3
Other	12

Table 6 lists some of the medical-obstetrical problems which these patients presented. Obesity, chronic hypertension, preeclampsia and hydramnios are all associated directly or indrectly with diabetes, either as predisposing factors or complications.

The most common neonatal problem was macrosomia (greater than 4000 gm) occurring in 18.04%. Hyperbilirubinemia defined as serum bilirubin greater than 8 mg/dl at three days of age or an infant treated with phototherapy occurred in 17.01%. Hypoglycemia (Dextrostix below 45 mg/dl) was present in 9.12%, most commonly this was mild and treated with early feeding. Meconium-stained amniotic fluid occurred in 14.44%; however, aspiration occurred in 25% (seven infants) and accounted for almost one third of the

Type II respiratory distress syndrome. All these infants survived and most aspirations were mild. Low birthweight infants (9.28%) were all premature by dates (37 weeks or less). Congenital anomalies were varied, occurring in 4.12%. Respiratory distress (10.31%) was severe in four with Type I or clinically true hyaline membrane disease in three premature infants and one term infant who also had hyperbilirubinemia and hypoglycemia. The remaining 16 patients had meconium aspiration (seven), wet lung or transient tachypnea (ten), or cold stress (one) (Table 7).

TABLE 7.—Neonatal Morbidity.

			Rate
Babies Live Born		194	
Macrosomia		35	18.04
Hypoglycemia		18	9.27
Hyperbilirubinemia		33	17.01
Hypocalcemia		4	2.06
Polycythemia		4	2.06
Meconium		28	14.44
Aspiration		7	(25)
Low Birthweight 2500 gm		18	9.28
Congenital Anomalies		8	4.12
Downs	2		
Multiple	1		
CNS	2		
Choledochal Cyst	1		
Other	3		
Respiratory Distress		20	10.31
Type I	4		2.06
Type II	16		8.25

Discussion • The overall effect on maternal glucose levels in pregnancy is a lowered mean fasting from 73±9 mg/dl early to 65±9 mg/dl near term. Maximal mean postprandial sugars also decrease physiologically in nondiabetic pregnancies, being 107 10 mg/dl early to 114±8 mg/dl in late pregnancy.

Diabetic control even in mild, noninsulin dependent or Class A diabetics should mimic the nondiabetic to maintain a normal in utero environment. Fetuses exposed to chronic or intermittently elevated maternal glucose levels, respond by increasing production and secretion of insulin. The latter acts as a growth hormone converting the increased nutrients to tissue resulting in macrosomia.

It should be noted that while we consistently measure blood sugars and relate control to their levels, amino acids, free fatty acids and proteins also stimulate insulin production and in doing so contribute to hyperinsulinemia in the fetus.

Looking at carbohydrate metabolism alone, mild derangements increase fetal risks resulting in increased macrosomia, congenital malformations, perinatal mortality and operative deliveries as manifested by the patients presented in this article.

Macrosomia was three times our overall hospital incidence (6.3 vs 18.04%). Hyperbilirubinemia and hypoglycemia are also far more common than the otherwise uncomplicated term newborn infant. Obesity and maternal weight gain during pregnancy may affect the incidence of macrosomia, however they would not influence bilirubin or sugar levels neonatally. Therefore, one can surmise that these infants were probably putting out excessive insulin in utero. Once the maternal supply lines were cut at delivery, hypoglycemia resulted. Control of sugars in labor may decrease the risk of neonatal hypoglycemia in those predisposed to its development. Since glucose rapidly crosses the placenta, high levels may first stimulate fetal hyperinsulinemia, increasing neonatal hypoglycemia.

The neonatal morbidity in these patients points out that noninsulin dependent gestational diabetes is not without its risks and complications for the neonate. Risks should be reduced by early diagnosis and control; therefore, the need to screen in pregnancy, especially those at greatest risk. It is also essential that the obstetrician understands the physiologic changes in glucose levels during pregnancy.

Since gestational diabetics are also at risk long term for the development of overt diabetes, perhaps diagnosis during pregnancy will alert the patient, especially the obese one, to instituting a program of weight loss.

Finally, the increased incidence of primary operative deliveries in this study (19.6%), almost twice our total hospital population, reflects not only the aggressive management of labor but also the increased risks these mothers present. Even looking at previous cesarean sections, 12.9% were repeat procedures.

Therefore, screening for, diagnosis and management of noninsulin dependent gestational diabetes is well within the forte of all practicing obstetricians. The benefits to be gained are a decreased risk of unexplained intrauterine fetal death, decreased neonatal morbidity, and identification of mothers at increased risk for overt diabetes.

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Bibliography

1 Gillmer, M.D.G., Beard, R.W., and Brook, F.W., et al: Carbohydrate Metabolism in Pregnancy. I. Diurnal Glucose Profiles in Normal and Diabetic Women, Br. Med. J. 3:399, 1975.

2 Schwartz, R. and Susa, J. Fetal Macrosomia, Animal Models, Diab. Care 3:430, 1980.

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Some observations on effect of a supportive companion during labor and delivery

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Over the years various circumstances and cultural practices have influenced the manner in which women have given birth. In many cultures the birth of a child has been considered a family affair and a part of ordinary life. For centuries it was the practice for family members, preferably a female, to give support and encouragement to the pregnant woman. This was very much the way of life until the late 1800's when, in order to attain better standards of care, the birth moved from the home to the hospital.

Recently there has been a reversal in this trend and in the last two decades there has been increased interest in allowing families to participate in their own care. Childbirth education has become prevalent and the Lamaze method of preparation for birth has met with wide acceptance. The formation of family-oriented birthing rooms has provided mothers with support during labor and delivery. Other alternatives, such as the Leboyer's gentle birth procedures and home deliveries, remain highly controversial.[1]

The Lamaze method of prepared childbirth is generally accepted by the medical profession. Although some benefits have been clearly defined, the theoretical basis for psychoprophylaxis have not yet been determined. Scott and Ross in a well-controlled study of 129 primigravid mothers who had completed Lamaze training noted that the women had a higher frequency of spontaneous vaginal delivery ($P < 0.001$), were administered narcotics less frequently during labor ($P < 0.001$) and received conduction anesthesia less often ($P < 0.001$) when compared to mothers in a control group who did not receive the childbirth education.[2]

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In another controlled study of 500 consecutive patients prepared by the Lamaze method, Hughey found fewer cesarean section and fewer postpartum complications when compared to a similar group of mothers who did not have the Lamaze preparation.[3] No differences in the length of labor were discovered in either study.

In Guatemala, two separate control studies of primigravid mothers revealed that the presence of an auxiliary person during labor and delivery can have beneficial effects on the mother.

In the first report 123 mothers were studied. Primigravid mothers in early labor with no known complications and having cervical dilatations of 1-2 cm were admitted to the study.

A woman was eliminated from the study for any maternal or fetal cause that deviated from the norm. Mothers whose infants were born asphyxiated or presented with any evidence of distress or illness were also eliminated from the study.

One group of mothers were randomly assigned to an untrained women who remained with them during labor and delivery. The support consisted of physical and intellectual contact, e.g., rubbing the mother's back, holding hands, conversing and constant companionship. In both groups mothers followed hospital routines which consisted of regular vaginal examinations to monitor labor, auscultation of fetal heart tones and assistance during delivery. No electronic fetal monitoring was conducted in either group.

Significant differences were found in the length of labor. The mothers in the support group had shorter labor times (8.8 vs 19.3 hours, $P < 0.001$). There was also a lower incidence of perinatal complications, i.e., meconium staining, depressed newborns ($P < 0.001$), and the need for pitocin augmentation.

After delivery both groups of mothers were allowed 45 minutes contact with their nude infants under a radiant heat warmer in a private room. A naive observer recorded behavioral observations on the interaction between the mother and her newborn infant.

Differences in maternal behavior towards their infants were noted. During the observation period, the experimental mothers remained awake for a longer period while the control group tended to spend more time of the early postpartum time sleeping. Also, when corrected for "percentage of awake time," the experimental mothers attained higher affectionate behavior scores while the control group mothers recorded lower degree of interaction with their babies.[4]

In an attempt to replicate this experience, a more extensive study with a similar design was conducted in Guatemala City. Over a two-year period, 417 primigravid mothers were studied.

The results of this study revealed that there was a higher incidence of perinatal problems in the control group (59% vs 27%, $P < 0.001$). Furthermore, there was a higher incidence of cesarean sections (17% vs 6.5%, $P < 0.002$) and a greater need for pitocin augmentation (13.3% vs 2.4%, $P < 0.001$) in the control group. For mothers with normal labor and delivery, labor length was longer in the unsupported group (15.4 vs 7.7 hours, $P < .001$).[5]

These observations raise the possibility of an association between maternal anxiety with arrest of labor and fetal distress. Although there has been little systematic study, there appears to be a correlation between maternal behavior, physiology and medical problems.

Studies on human primate monkeys suggest that one mechanism may be the release of catecholamines which are known to decrease uterine activity and contractility.[6] Lederman found that plasma epinephrine levels were associated with decreased uterine contractility, onset of labor and longer duration of labor from 3 to 10 c.m.[7]

Fetal distress can be associated with increased levels of catecholamines secondary to decreased placental blood flow. Barton noted considerable reduction in blood flow in the sheep uterus following injections of epinephrine and norepinephrine.[8] Catecholamines injected into rhesus monkeys by Adamson has resulted in fetal asphyxia.[9]

Stimulated by clinical studies and increasing consumer interest, hospitals have established programs that have enabled many innovations in childbirth techniques. In a survey of 645 women, Scoer and Karte recorded the preferences of women for maternity options. The most important aspects of hospital care desired by these women were related to keeping the family together.

The mothers opted for unrestrictive attendance of the father during delivery, combined labor-delivery rooms, private postpartum rooms, family hours for sibling interaction with mother and baby as well as family-centered procedures for cesarean births and alternative birth centers within the hospital.[10]

While high standards of technical care are essential to assure the physical health of the mothers, it is also necessary to provide adequate physical and emotional support to these mothers.

Evaluating the new attitudes toward childbirth is the responsibility of the medical profession. These are important considerations that require further study as they will influence the care of mother and babies during pregnancy and birth.

References

1. Nelson, N.M.; Enkin, W., and Saegal, S., et al: Randomized Clinical Trial of Leboyer Approach to Childbirth, N. Eng. J. Med. 302 655, 1980.
2. Scott, J.R., and Ros, N B. Effect of Psychoprophylaxis (Lamaze Preparation) on Labor and Delivery in Primiparas, N. Eng. J. Med. 294:1205, 1974.
3. Hughey, M.J.; McElin, T W., and Young, T.: Maternal and Fetal Outcome of Lamaze-Prepared Patients, Obstet. Gynecol. 51:643, 1978.
4. Sosa, R. and Kennell, J., et al.: Effect of Supportive Companion on Perinatal Problems, Length of Labor, and Mother-Infant Interaction, N. Eng. J. Med. 303:597, 1980.
5. Klaus, M.; Kennell, J., and Sosa, R.: Child Health and Breastfeeding: Effect of Supportive Woman (Doula) During Labor and Effect of Early Suckling (abst.). Pediatr. Res. 15:450, 1981.
6. Zuspan, F.P.; Cibilis, L.A., and Pese, S.V.: Myometrial and Cardiovascular Responses to Alterations in Plasma Epinephrine and Norepinephrine, Am. J. Obstet. Gynecol. 84:841, 1982.
7. Lederman, R.P.; Lederman, E., and Work, B.A., et. al.: Relationship of Maternal Anxiety, Plasma Catecholamines, and Plasma Cortisol to Progess in Labor, Am. J. Obstet. Gynecol. 132.495, 1978.
8. Barton, M.A.; Killan, A P., and Mischia, G.: Response of Ovine Uterine Blood Flow to Epinephrine and Norepinephrine, Proc. Soc. Exp. Biol. Med. 145:996, 1974.
9. Adamson, K.; Mueller-Heubach, E., and Meyers, R E.: Production of Fetal Asphyxia in Rhesus Morley or Administration of Catecholamines to Mothers, Am. J. Obstet. Gynecol. 109:248, 1971.
10. Scoer, R., and Karte, D.: MOM Survey: Maternity Options for Mother — What Do Women Want in Maternity Care? Birth Family J. 5:141, 1978.

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Fetus as patient — medical legal and ethical dimensions

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ABSTRACT: Medical and surgical treatment of the fetus has advanced rapidly in the last decade. Although most procedures still are experimental, their use has encouraged physicians to examine the legal and ethical aspects of in utero treatment. Techniques are currently being developed which make the fetus a patient. While the law does not consider the fetus as a person, courts will take action to protect the life and wellbeing of a fetus once it is viable. In most cases, interests of the mother are compatible with the fetus and the decision to intervene in utero is made with the informed consent of the mother. However, courts have the right to override the mother's refusal to protect the life of a viable fetus. The mother and fetus are inseparable as patients; therefore, the physician must weigh the relative risks and benefits to both mother and fetus in recommending treatment.

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In utero intervention on behalf of the fetus has come a long way since the first successful intrauterine transfusion by Liley in 1963.[1] This paper reviews the current status of medical and surgical treatment of the fetus and some of the legal and ethical issues in fetal intervention.

There have been a number of reports where administration of medication to the mother had a salutory effect on the fetus. Mothers have been given: glucocorticoids to prevent or decrease the severity of the respiratory distress syndrome in premature infants;[2] digoxin to treat fetal paroxysmal supraventricular tachycardia with or without congestive heart failure;[3] vitamin B 12 when it was determined the fetus had a rare vitamin B 12 responsive methylmalonic acidemia disorder;[4] and, biotin when a fetus was determined to have a multiple carboxylase deficiency.[5]

Insertion of a needle into the amniotic cavity or directly into the fetus has been utilized to: administer intraperitoneal blood in cases of Rh sensitization;[1,6] inject thyroxine into the amniotic fluid to accelerate surfactant production and decrease incidence of the respiratory distress syndrome in premature infants;[7] provide thyroxine therapy to a fetus with a proven goiter secondary to maternal treatment for hyperthyroidism;[8] give amino acids to growth retarded infants;[9] do serial cephalocentesis in a fetus with progressive hydrocephalus;[10] place a ventriculoamniotic shunt using real-time ultrasound guidance in an infant with hydrocephalus;[11,12] place suprapubic catheters in fetuses with obstructive uropathy.[13,14]

Experience with hysterotomies and performing surgical procedures directly on the fetus has been limited to performing in utero exchange transfusions and one case report involving a fetus with obstructive uropathy.[6,15]

As stated by Harrison et al,[5] "It seems likely that the fetus with a treatable birth defect is on the threshold of becoming a patient."

The dramatic advances in the surgical treatment of the fetus prompted one journalist to note that "...the womb is no longer the symbol of inviolable privacy but a surgical theater like any other."[16]

In utero intervention: legal issues • Current status of common law leaves many questions unanswered regarding responsibilities of the medical profession in treating the mother and her unborn child. Most of the procedures discussed in this paper are still regarded as experimental. Public Health Service guidelines for the protection of human subjects state that the medical or surgical treatment of the fetus may be initiated only for the purpose of preventing injury or preserving the life of the fetus. In utero techniques may not be performed solely for the purpose of medical research or the development of scientific knowledge.[17] At this time, no federal guidelines exist to aid the physician in making a decision to initiate or withhold treatment on the fetus.

While many federal therapies remain experimental, one can foresee a time when in utero procedures will become the standard treatment for specific disorders which are diagnosed prior to birth. Public demand for these procedures may encourage physicians to examine their responsibilities in the treatment of the unborn child.

Is the fetus a patient? If so, what are the legal issues in treatment? Some confusion exists in the law concerning the legal right of the fetus. Following the 1973 Supreme Court ruling in Roe v. Wade, the state has the right to protect the life and wellbeing of the fetus after it has reached the point of viability.[18] The viable fetus has legal rights which the state not only has the right but also an obligation to protect.[19]

In most cases of fetal intervention, parents agree to the procedure. However, in cases where the mother refuses to consent to a procedure intended to benefit the fetus, the courts have intervened to protect the interests of the unborn child. In one such case, a morbidly obese woman was ordered by the Colorado juvenile court to undergo a cesarean section for fetal distress. In this case, the unborn child was declared a dependent and neglected child and surgery was ordered.[19] The Colorado court cited several cases supporting its decision. In New Jersey, a mother who had refused a blood transfusion on religious grounds had her decision overridden by the New Jersey district court in the interest of the fetus. In another New Jersey case, the state found that it had both the right and the obligation to protect the health and safety of the unborn child regardless of the parents' wishes.[19]

Parents are not legally obligated to undergo personal risks to improve the quality of life of their children. However, the courts are willing to impose this obligation upon the mother for the benefit of her unborn child. There is no corresponding obligation currently imposed upon fathers or other family members. For example "...fathers are not currently required to give blood, bone marrow, or kidneys to spare their children a life of significantly low quality."[20] The biological relationship between mother and fetus is the basis for this unique obligation. Once delivery has occurred, maternal and paternal obligations to their children are the same.

To date, there is no standard statutory law governing the rights of the fetus or the liabilities of parents or physicians. Considerable confusion exists concerning the legal obligations of physicians in treatment of the fetus. The need to balance the interests of the unborn child against those of the mother provokes controversy and may well be decided through the courts.

In Florida, our research was unable to identify any case of court-ordered in utero intervention to protect the fetus. However, the trend in common law appears to support such action based on the doctrine of parens patriae. Under this principle, the state maintains the right to protect the health and wellbeing of a child over the objections of parents or legal guardians. In addition, the Florida Department of Health and Rehabilitative Services (Abuse Registry) both investigates and intervenes on behalf of the fetus in cases of reported abuse involving a pregnant woman. The informal policy of the Abuse Registry is to treat the unborn child as a child and intervene to protect its health and safety.[21] Further legal precedent in Florida is established under the Baker Act which permits the state to protect the unborn child in cases where the mother is shown to be dangerous to herself or others and the Meyer Act which allows for similar action if the mother is engaged in the abuse of drugs or alcohol.

The rights of the pregnant woman to refuse or consent to treatment intended to benefit either herself of her unborn child are modified as the pregnacy progresses and the fetus reaches the point of viability. As Bross and Meredyth note, [22] "whether the woman actively wants a pregancy or passively submits to it, her control over the growing fetus becomes increasingly limited by nature." The case law reviewed above indicates that maternal rights are similarly subject to progressive limitations by the law.

The real and/or potential liabilities of the physician in cases of in utero intervention include the following:

1. The physician is obliged to conduct the procedure in a competent manner, consistent with standards of care in the medical community. Failure to do so constitutes negligence, and the physician is liable for damages resulting from injury to the patient.
2. The physician is obligated to obtain informed consent from the mother prior to initiating fetal intervention. The consent process should include full

discussion of the known risks to both mother and fetus, and the anticipated benefits and alternatives associated with the procedure.

3. The physician may seek permission from the court to initiate treatment of the fetus in the event the mother refuses. However, it is unclear whether the physician is obliged to do so.

4. The liability of the physician who withholds treatment from the fetus with a potentially correctable defect has not yet been established due to the experimental nature of current treatments. Should fetal therapies become the standard of care the courts may mandate therapy on behalf of the fetus. In that event a physician who withholds treatment from the fetus may be held liable. Withholding fetal therapy has not yet been tested in the courts, though a somewhat analagous situation has been successfully prosecuted. A physician was held liable for brain damage that was sustained by a fetus due to failure to perform a cesarean section that was medically indicated.[19]

The interest of the federal government in similar issues is ever-increasing. For example on March 7, 1983, the Department of Health and Human Services established the Infant Doe Hotline Number for use by those who wish to report alleged discrimination against handicapped infants by failing to feed or care for those infants.[23] It is easy to envision this rule extending to the fetus with a correctable disorder. At the time of this writing, the ruling likely will be challenged in the courts.

Ethical issues • From a medical perspective, the physician's relationship to the unborn, but viable, fetus is inseparable from the physician's relationship to the mother. The physician has access to the fetus only through the mother's body. While legal precedent exists to intervene on behalf of the fetus over the objections of the mother, the physician must weigh the relative risks and benefits of any procedure in determining whether to initiate or withhold treatment of the fetus. An extreme example is cited by Dillon et al[24] who reported their experience in maintaining bodily functions in a pregnant woman who had experienced brain death in order to increase the fetal chances for survival.

In drafting policy toward treatment of the fetus, there is a need to temper concern over the rights and wellbeing of the unborn child with considerations for the wellbeing and rights of the mother. The bioethicist, Father McCormick, has stated,[25] "I feel compelled to say that where effective treatment is available, treatment is the only morally defensible alternative." While we are sympathetic to this view, we also acknowledge the need to balance concern for the wellbeing of the fetus with careful consideration for the wellbeing of the mother.

John Fletcher[26] foresees the problem of considering the fetus as patient. He stated that, ". . . the fetus with a treatable defect could not be fully considered a patient until separate from the mother, unless one took the position of being willing to coerce the mother to let the pregnancy go to term."

Do fetal rights to therapy take precedence over the maternal rights? Fletcher comments,[26] "... it would be unwise now in fetal therapy to close the issue between fetal interests and parental interests in favor of the fetus. As long as the fetus is not separate from the mother, choices about treatment ought to be made only with her informed consent."

We do not want to give the impression that when a congenital malformation or disorder is discovered maternal and fetal interests necessarily differ. As new fetal therapies become available, effective, and safe for both the mother and fetus, it is anticipated that maternal and fetal interests often will coincide.

In the case of fetal intervention, the physician is treating two patients simultaneously. The wellbeing of both mother and child must be considered in determining any treatment.

References

1. Liley, A.W. Intrauterine Transfusion of Foetus in Haemolytic Disease, Brit. Med. J. 2:1107-1109, 1963.
2. Ballard, P.L. and Ballard, R.A. Corticosteroid and Respiratory Distress Syndrome Status 1979, Pediatrics 63:163-165, 1979.
3. Kleinman, C.S., Donnerstein, R.L., and DeVore, G.R., et al: Fetal Echocardiography for Evaluation of Inutero Congestive Heart Failure, N. Engl. J. Med. 306:568-575, 1982.
4. Ampola, M.G., Mahoney, M.J., Nakamura, E., and Tanaka, K. Prenatal Therapy of Patient with Vitamin B12 — Responsive Methylmalonic Acidemia, N. Engl. J. Med. 293:313-317, 1975.
5. Harrison, M.R.; Golbus, M.S., and Filly, R.A. Management of Fetus with Correctable Congenital Defect, JAMA 246:774-777, 1981.
6. Queenan, J.T. Intrauterine Transfusion. Cooperative Study. Am. J. Obstet. Gynec. 104:397-405, 1969.
7. Mashiach, S., Barkai, G., Sack, J., Stern, E., Brish, M., Goldman, B., and Seer, D.M. Effect of Intraamniotic Thyroxine Administration on Fetal Lung Maturity in Man, J. Perinat. Med. 7:161-169, 1979.
8. Weiner, S., Scharf, J.I., Bolognese, R.J., and Librizzi, R.J. Antenatal Diagnosis and Treatment of Fetal Goiter, J. Repro. Med. 24:39-42, 1980.
9. Renaud, R., Vincendon, G., and Boog, G., et al. Injections Intra-amoniotiques d'Acides Amines dans les Cas de Malnutrition Foetale, J. Gyn. Obst. Biol. Repr. 1:231-244, 1972.
10. Birnholz, J.C. and Frigoletto, F.D. Antenatal Treatment of Hydrocephalus, N. Engl. J. Med. 303:1021-1023, 1981.
11. Clewell, W.H.; Johnson, M.L., and Meir, P.R., et al. Surgical Approach to Treatment of Fetal Hydrocephalus, N. Engl. J. Med. 306:1320-1325, 1982.
12. Manning, F.A. International Fetal Surgery Registry, Department of Obstetrics, Gynecology, and Reproductive Sciences, University of Manitoba, 59 Emily Street, Winnipeg, Manitoba, Canada R3E OW3.
13. Harrison, M.R., Filly, R.A., and Golbus, M.S., et al: Fetal Treatment 1982, N. Engl. J. Med. 307:1651-1652, 1982.
14. Harrison, M.R., Filly, R.A., and Parer, J.T., et al: Management of Fetus with Urinary Tract Malformation, JAMA 246:635-639, 1981.
15. Harrison, M.R.; Golbus, M.S., and Filly, R.A., et al: Fetal Surgery for Congenital Hydronephrosis, N. Engl. J. Med. 306:591-593, 1982.
16. Fadiman, A. Saving a Baby's Brain, Life, April:44, 1983.
17. Code of Federal Regulatinns Title 45, subpart 46.209. Office of Protection from Research Risk, National Institutes of Health, Department of Health and Human Services, 1978.
18. Roe V. Wade, 410 U.S. 113, 1973.

19. Bowes, W.A. and Selgestad, B.: Fetal Versus Maternal Rights Medical and Legal Perspectives, Obstet. Gynec. 58:209-214, 1981.
20. Ruddick W. and Wilcox, W.: Operating on Fetus, Hastings Center Report 12:10-14, 1982.
21. Jolley, J.: Personal Communication, Supervisor Florida Abuse Registry, Florida Department of Health and Rehabilitative Services March 30, 1983.
22. Bross, D.C. and Meredyth, A.: Neglect of Unborn Child. Analysis Based on Law in United States, Child Abuse Neglect 3:643-650, 1979.
23. Department of Health and Human Services Interim Final Rule. Rehabilitation Act of 1973. Section 504. Federal Register, March 7, 1983.
24. Dillon, W.P., Lee R.V., and Tronolone, M.J., et al: Life Support and Maternal Brain Death During Pregnancy JAMA 248:1089-1091, 1982.
25. Barclay, W.R., McCormick R.A., and Sidbury J.B., et al: Ethics of In Utero Surgery JAMA 246:1550-1555, 1981.
26. Fletcher J.C.: Fetus as Patient: Ethical Issues, JAMA 246:772-773, 1981.

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Development and evaluation of a statewide communication and referral system (CARE line)

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ABSTRACT: The Florida Perinatal CARE Line (Consultation and Referral) performance is reviewed. Evaluation of newborn transport outcome revealed primarily problems of access — time, distance, and availability of functional bedspace for critically ill neonates. Systematic data analysis provided impetus to the development of Stepdown Neonatal Units by 1982 legislative authorization to increase RNICC accessibility and support to the community physician.

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Florida's Regional Perinatal Intensive Care Program first received legislative appropriation from general revenue funds in July 1975 with the establishment of five Regional Neonatal Intensive Care Centers (RNICC) at Pensacola, Jacksonville, Gainesville, Tampa and Miami. Within two years, even though centers were added in Orlando and St. Petersburg, each of the RNICC's, particularly in the urban areas, was not able to respond to all neonatal transport requests due to insufficient functional bedspace. This created a dilemma for the referring physician, usually in a small hospital, to attempt to find an available bed as well as to coordinate transport to one of the RNICC's outside the local geographic area while simultaneously providing care to a critically ill neonate.

In 1977 a statewide WATS line (CARE line) 1-800-282-2735 was initiated with HRS-Children's Medical Service and Florida Pediatric Society support to assist in placement of neonates to designated RNICC's and to provide 24 hour access to neonatologists and perinatologists for consultation. In addition, this provided a method of equitably distributing neonatal and obstetric referrals when the usual geographic center was "full" and freed the referring physician to primarily provide medical care and "stabilize" the infant.

A centralized 24 hour staffed registry was developed to maintain the census of available neonatal beds in each of the state RNICC's by use of an Out-WATS census call every eight hours. A direct dial In-WATS line and tele-patcher device were provided to access the registry and permit rapid connection at the referring physician's request to any of the RNICC's for consultation or to the center which indicated available bedspace.

For the first two years, this system was a highly effective resource for referring physicians who were unable to secure a bed at the usual site of referral. However, as Florida's birth rate escalated from 100,000 per year to 145,000 per year (projected 1982) without the addition of new neonatal state-supported RNICC beds, increasing difficulty was encountered in placing infants (Table 1). Concomitantly, state funding for obstetric perinatology began in 1978 and resulted in more "high-risk" maternal transports to the regional centers who subsequently gave birth to very low birthweight infants with an increased length of stay as mortality decreased. Such infants might have required transportation to regional centers previously.

TABLE I.—CARE line Coordinated Neonatal Transports, 1977 - 1982.

Fiscal Year	Requested	Placed	Unable
77/78	293	278	15
78/79	471	443	43
79/80	616	425	135
80/81	859	625	224
81/82	1105	562	501
82/83 (Projected 6 month data)	710	471	239

Perinatal communication systems have rarely been evaluated with regard to their effect on outcome.[1] For this reason a computerized time sharing data management system was added in February 1979 using remote access from a terminal at the CARE line to the University of South Florida's IBM 3033 system utilizing SAS software to attempt analysis of 24 hour outcome, mortality of untransferred infants, assessment of hospitals and physicians for special education in stabilization of newborn infants, and to identify those referring hospitals which might require intervention to improve accessibility. It is the purpose of this paper to present analysis of neonatal transport outcome (24 hour) and efficiency for infants either placed at Regional Neonatal Intensive Care Centers vs those who failed placement after request. The data are unique in that they are derived from the "court of last resort" for neonatal referral for an entire state over 32 months. The data have been helpful in analysis of the Florida Regional Perinatal Intensive Care System performance and in guidance of further developments in response to the problems identified.

Methods • A relatively simple data input form for the telephone operator on the CARE line was devised with the following data fields: A-Patient Identifier, B-Referral Source, C-Disposition, D-Transport, E-Outcome, F-Diagnostic Class. Follow-up calls were made within 24-48 hours to verify the times required as well as to determine outcome at greater than 24 hours after transport. Survival time at 24 hours after transport was arbitrarily assigned as an index of the efficiency/efficacy of transport. Decease subsequent to that time was unlikely to be directly related to transport.

An internal data base was created to relate all of the 190 hospitals in Florida delivering infants, their counties, and their distance to each of the neonatal referral centers sponsored by the state of Florida. In addition the data system could assign the "nearest" geographic center to each of the hospitals as well as determine the number of centers by-passed when infants were assigned "long distance" neonatal transport. Codes were placed for referral from the states of Georgia and Alabama although distances were not assigned.

Results • Initial evaluation of data identified each hospital and transport result; specifically, the percent of infants placed, the percent that could not be placed or were cancelled and the percent of those infants who died. Twenty-four hospitals were identified which had greater than 50% mortality of infants referred to the CARE line for placement when an RNICC bed could not be secured. Such data are helpful as a form of peer review when utilized to identify facilities for physician-directed educational activities for improvement of infant stabilization while awaiting transport. During the 32-month period of analysis 76.9% of infants were placed upon request. Mortality of unplaced and cancelled neonatal transports was 33.3% vs 12.4% for those placed in neonatal centers.

Outcome was defined (Table 2) so that the techniques of multiple regression analysis and interval analysis using the statistical analysis system (SAS) could be utilized to establish correlation and to determine if there were factors which would predict either Outcome A — Survival or Outcomes B, C, or

TABLE 2.—Outcome.

		Number
A—	Survived 24 or more hours after conclusion of transport	1123
B—	Survived $\lt$ 24 hours after conclusion of transport	38
C—	Died during transport	13
D—	Died after accepted for transport but before arrival of neonatal transport team	25*

*Plus 69 died prior to transport acceptance

D which were adverse outcomes. To increase the size of the adverse outcome population for calculation we included those infants who were cancelled because they had died prior to transport. This created a sample size of 1268 neonatal transports for analysis.

A new term SURVTME (Survival Time) was defined and divided into segments shown in Table 3 consisting of:

Reftme — Birth to referral.

Acctme — Time from referral to the CARE line to the time of definitive acceptance at an RNICC.

Arrtme — Time between acceptance and arrival of transport team at the patient.

Trvltme — Time between arrival at patient and arrival at the RNICC.

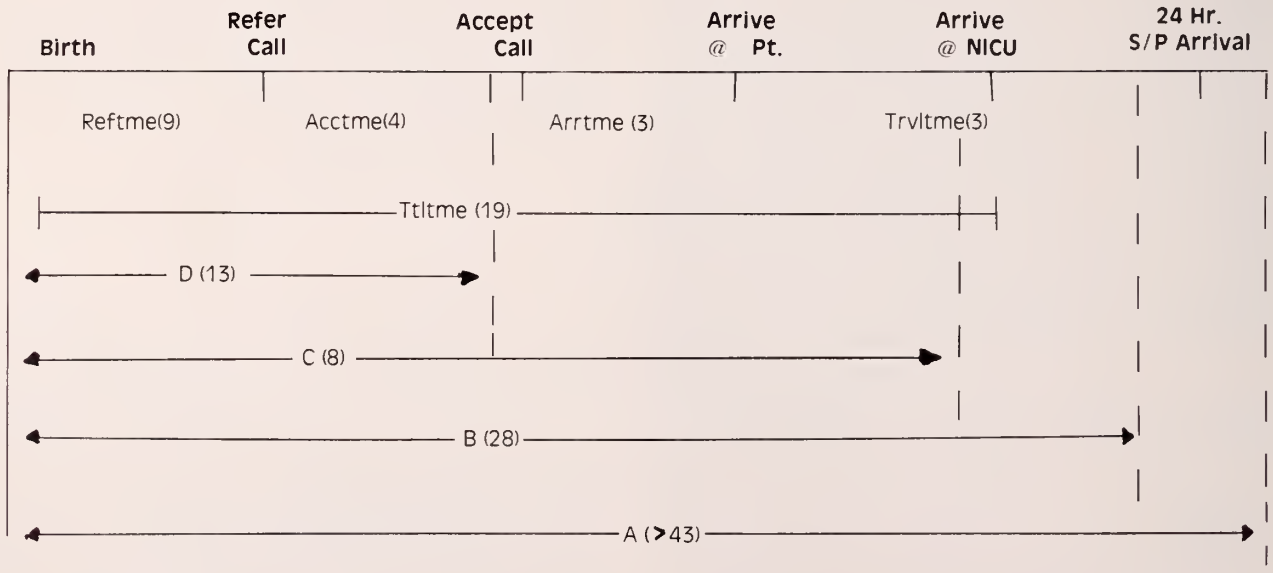
For the technique of interval analysis the assumption made is that outcome A is equal to 24 hours plus the average of total time being 19 hours or a SURVTME greater than 43 hours.

Observations were encountered different from RNICC perceptions. Specifically, there is greater inherent delay from birth to referral of an infant to an RNICC with mean time interval being nine hours. (Reftme) The mean time interval between referral and decision to accept the transport takes four hours, which is greater than the average time for a team to travel to the referring hospital or needed to return to the NICU. Clearly, this shows that there is a need to direct attention to the RNICC's to accelerate the decision making process. Outcome C, infants who died during transport survived a mean of eight hours from birth; this implies an extremely morbid population of infants who are referred immediately after birth and who probably would not have survived regardless of how rapidly they were transported. Outcome D, those infants who died before transport, have a mean SURVTME equal to the period of time of decision making both by the referring and the accepting physician; a problem which must be addressed to accelerate both components.

Stepwise multiple regression analysis using SURVTME as the dependent variable and 14 independent variables for groups B, C and D was performed. Of these, the three major variables contributing to outcome were asphyxia, respiratory-other (meconium aspiration), and cardiovascular disease. At the present time this population has not been further analyzed to determine whether the cardiovascular disease represented lethal malformations. Meconium aspiration is potentially preventable with appropriate delivery room resuscitation of term infants.

Stepwise multiple regression analysis was performed utilizing SURVTME as the dependent variable and the transport method or personnel as independent variables with separate analyses by disease for categories A, B and C. There was no significant difference in outcome by either transport method or the composition of the transport team.

TABLE 3.—Calculation of Survtme.



() Refers to overall group means in hours.

TABLE 4.—PERFORMANCE DATA.

Code Center	I GEO Closest % Accept	II To Pt. To Ctr (MPH)	III REF ACTME	IV BYPASS NUMCTR	V TOT #	VI MEAN TRAV TIME	VII MEAN TOT TIME
01	36	19/21	3.44	1.7	217	2.6	19.5
02	16	44/44	6.69	4.4	109	4.0	20.3
03	31	56/43	7.23	5.4	85	4.4	19.8
04	13	19/25	5.13	2.1	82	2.7	18.5
05	6	108/90	3.92	6.7	42	4.7	20.4
06	29	24/22	3.79	2.0	129	3.1	16.5
07	33	23/24	3.79	2.2	208	3.0	19.8
08	13	31/31	6.16	2.2	79	2.4	16.2
09			6.18		145	2.9	16.6

Comparative performance data were generated with regard to the RNICC's as shown in Table 4.

1. The computer through its data base was able to calculate the percentage of acceptance when a given center was geographically closest (Column I). These percentages varied from a low of 6 to a high of 36.
2. The speed of response both to the patient and to the center was placed on a quantitative basis by calculation of distance divided by time and calculation of mile per hour response to the patient and return. Facilities heavily dependent on air transport have much higher velocities of response (Column II).
3. The time of decision making is shown in Column III and shows considerable variance from a low of 3.44 hours to a high of 7.23 hours.
4. Column IV views the mean number of centers by-passed which are closer to the referring hospital and ranges from a low of 1.7 to a high of 6.7. Optimal accessibility to the closest RNICC would approximate 0.
5. Column VI shows variation in mean travel time and mean total time.

In spite of the obvious difficulties in assuring acceptance of the critically ill neonate demonstrated by the quantitative data there were no significant differences in survival time between all CMS RNICC's.

Conclusions • The use of a centralized data base and registry has assisted in documenting the effectiveness of neonatal transport in Florida, clarified that there is no difference in outcome associated with the composition of the transport team or the vehicle utilized and has assisted in defining areas for medical outreach education and improved consultation. It has also delineated areas which require further intervention to provide improved access to the RNICC's. These data provided powerful impetus to the "landmark" provision of "Step-down NICU" funding by the 1982 Florida legislature. Currently, five additional centers in Sarasota, Tallahassee and Jacksonville have joined the program to provide needed beds for infants recuperating after care in the state RNICC's and thus to provide improved access for those neonates requiring tertiary care. Projected data based on six month 1982/83 performance suggest improved access to RNICC's since initiation of the "Step-down NICU" program.

Reference

1 Perlstein, P.H.; Edwards, N.K., and Sutherland, J.. Neonatal Hotline Telephone Network, Pediatrics 64:419, 1979.

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Step-down neonatal special care: an innovative approach to regional neonatal services

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ABSTRACT: The development of step-down care programs is a new approach which provides an increase in neonatal bed availability while at the same time addressing the issue of minimizing costs. In late 1982, Sarasota Memorial Hospital became the first operational Step-down Special Care unit in the state system, providing care for recuperating neonates who are no longer in need of acute intensive care facilities, and can be returned to much closer geographic proximity to their homes, facilitating easier access for parents, and greater involvement in their infants care before discharge. It is apparent to us that the advent of step-down care can be a significant innovation in the development of state perinatal care systems, and may lead to other new approaches that are cost-effective and improve the level of services provided in the state.

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The Florida Regional Perinatal Program is now entering its second decade of operation and development. As a program initially conceived to get sick and immature neonates to centers providing a myriad of sophisticated services and to postively affect the degree and quality of their survival, it has been successful. However, the nature of this success has brought problems that challenge the program now.

In recent years, media attention has focused on problems involving funding of the program and the crisis of bed availability. Very little public attention has been directed to the background reasons for these problems. In the more than 10 years the program has been operating, the population of Florida has increased more than 70% and the number of births has likewise significantly increased. Within this decade the program has added several prenatal centers. The net effect of these changes has been to bring more immature infants who require longer intensive care stays and thereby cause a significant decrease in bed turnover.

The significant increases in perinatal patient care funding achieved recently have essentially only kept pace with the decade-long spiral of inflation and have not in actuality addressed the very substantial problem of neonatal patient population growth. It is apparent that if Florida is to keep pace with the national goals and expectations of perinatal care systems, new ideas and approaches must be developed for minimizing costs and at the same time providing more beds with easier patient access into the system. Indeed, recent statistics from the southeast region of the nation indicate that Florida and several other southeastern states have lost ground in the national ranking of states relative to perinatal morbidity and mortality.

The development of step-down care is a new approach which attempts to provide increased neonatal bed availability while minimizing costs. This program

funded by the state legislature in fiscal 1982 has just begun operation. As with all new programs it faces misconceptions, misperceptions, and general miseries during its nativity. The basic premise of step-down care is to provide neonatal beds for infants who are stable and recuperating and no longer in need of acute neonatal intensive care facilities. This may be accomplished at peripheral hospitals where special care facilities and staff are available but where costs are reduced partly because they do not have to supply all the ancillary services and staff necessary at a level 3 neonatal intensive care unit. These step-down units will be established in several areas so that when an infant is moved it is much closer geographically to home, thus facilitating easier access for parents and greater parent involvement in the infant's care before discharge. Although a step-down care unit would be under the direction of a qualified neonatologist, it would by its very nature and location utilize and involve local pediatricians in care of infants and facilitate local participation in follow-up care of neonates discharged from the unit. The most significant aspect of step-down care would be the increase in number of neonatal beds available within the perinatal system producing a more rapid turnover of beds available at the perinatal centers.

In November 1982 Sarasota Memorial Hospital became the first Operational Step-Down Special Care Unit in the state perinatal system. The unit was initially designated as having seven step-down beds within the physical context of the 13 bed neonatal special care unit. Twenty-four hour medical coverage is provided by a neonatologist and a pediatrician with special expertise in neonatal special care. After a slow start the Unit provided services for 15 patients in its first four months of operation.

Any community oriented hospital which provides neonatal special care services is constantly subject to wide fluctuations in neonatal bed usage and therefore wide variations in its neonatal nursing needs. This is especially true of hospitals that deliver between 1800 and 2500 inborn neonates per year. Since these facilities are not centers which accept transport of sick infants in from peripheral facilities, there is great difficulty maintaining the expertise of a neonatal nursing staff and convincing the hospital administration that there is a need for a larger and better trained nursing staff. At Sarasota Memorial where 2300 infants are delivered a year, the situation has been drastically altered. Since inception of step-down care the patient census in the neonatal special care unit has varied between five and 14 patients whereas previously the census ran between zero and five patients, a much more consistant patient population and much more dependable projections for nurse staffing. At the same time, the advent of step-down care has provided an opportunity for daily rounds with the medical director and weekly staff meetings in the unit. These have produced a dramatic improvement in neonatal nursing proficiency and a concomitant change in nursing morale.

We can expect, as experience develops, that needed changes in operation will become apparent. Several important controls and restrictions have already been built into the system to assure appropriate utilization and medical expertise in step-down care. As presently conceived all step-down care units must be under the medical direction of a physician who is subboard qualified in neonatal-perinatal pediatrics and all units are to be medically affiliated with one of the state level 3 centers. Presently, all patients admitted to step-down care must come from a neonatal center. This aspect of the plan is important. In some states where intermediate or step-down-like facilities have been established, level 3 centers have lost control and direction of the system and often neonates appropriately needing level 3 services have been kept at intermediate facilities when level 3 beds have been available. The close association between perinatal centers and step-down care facilities is further enhanced, since in Florida's perinatal system the centers are primarily responsible for outreach education and training.

It is apparent to us that the advent of step-down care can be a significant innovative advance in the development of state perinatal care systems. It is no panacea and will not resolve the issues of cost-containment and adequate funding of present level 3 neonatal intensive care beds. Hopefully, this experience will lead to other innovations in the provision of perinatal care systems that are cost-effective and improve the level of perinatal care services provided throughout the state.

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Transport of the sick neonate

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ABSTRACT: Pensacola's Sacred Heart Hospital began a regional transport system for sick neonates utilizing licensed paramedics and registered nurses in 1973. The transport team provides planned, orderly and controlled transport of sick neonates using a specialized van and fixed wing aircraft.

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The objective of an infant transport service is performance of planned, orderly, and controlled transfer of sick infants to facilities offering specialized services. How this will be accomplished varies with the needs of the region served.[1] Recent improvements in perinatal intensive care have focused attention on the logistic problems of providing access to these patients. Ideally, early identification of risk would allow prevention by early intervention. Even in an ideal system many problems may not be identified before birth. Thus, transport of the critically ill infant continues to require the attention of those who provide and plan for neonatal intensive care.[2]

The regional referral center is an example of professional cooperation consisting of sharing expertise limiting duplication of services, and controlling costs. Patients requiring critical care are transferred to centers in their region. Often it is the responsibility of the center to provide access to its high quality critical care services, and establish supporting transportation systems.[3]

The ultimate goal of an infant transport service is reduction of morbidity and mortality. To attain this goal, the program must provide controlled transfer of a stabilized infant.[1] The need for stabilization of sick neonates before and skillful management during a journey to a neonatal center is readily accepted by those working in such centers.[4]

Each system must be responsive to the needs of the referring hospitals it serves.[3]

Transport systems vary according to terrain, population density, weather patterns, and availability of special surface or air carriers.[5] The team organization reflects the needs of the region served and is dictated by financial and personnel limitations.

Effective use of appropriately selected and trained nonphysician personnel is well documented. Reaching the program objectives requires meticulous attention to a myriad of details in selecting appropriate vehicles, equipment, drugs, and the transport team.[1]

The Regional Perinatal Intensive Care Center addressed this issue by designing an infant transport system in 1973 which consisted of an infant transport van, fixed wing aircraft, and highly skilled neonatal transport team.

Transport Vehicle • The Sacred Heart Hospital infant transport van is a standard Dodge van with custom built interior designed and installed by our hospital maintenance department. It has formica paneling, wooden cabinets, carpeting, and a 115-volt generator. The left side of the van has a recessed, padded work table with overhead radiant heater. The work table end is hinged to facilitate endotracheal intubation. The van meets state emergency medical services standards and is used with a Piper Navajo Chieftan fixed wing aircraft available on 24-hour call at the municipal airport, ten minutes from Sacred Heart Hospital, for longer transports (Fig. 1). Previously, helicopter transports utilized the U.S. Navy Search and Rescue Unit, HCT-16 at Pensacola's U.S. Naval Aerospace Regional Medical Center. The helicopters were large twin rotor UH-46's. Inflight difficulties with helicopters included vibrations which caused frequent infusion pump alarms, wide fluctuations of oxygen analyzing needle, excessive noise making visual alarms mandatory, lack of heating or cooling systems in air craft and occasionally air sickness by personnel.

Transport equipment • Transport equipment includes Ohio or Cavitron isolette, ventilator and additional equipment necessary for complete ventilatory and chemical resuscitation. These are maintained through check lists for all equipment.



Fig. 1. — Infant transport van and fixed wing aircraft. Courtesy of David Kempton, Audiovisual Technician, Pensacola Education Program, Pensacola.

Transport team • The transport team consists of a registered nurse and licensed paramedic. Employees from the Hospital Purchasing Department, available 24 hours each day, are utilized as drivers and must meet requirements established by the county emergency medical services. Transport nurses are selected from the regular neonatal intensive care unit nurses. Basic requirements include licensure as a registered nurse, six months practical nursing experience in the NICU, completion of nursing neonatal transport course and three transports accompanied by a certified neonatal transport nurse. Transport nurse duties include: checking Cavitron isolette and additional equipment, setting up IV fluids, obtaining emergency resuscitation drugs and insuring they are in-date, obtaining vital signs, and caring for the infant during transport, recording nursing notes and reporting to the nurse who will be in charge of baby on return to ICN. The charge nurse designates the "van nurse" at the beginning of each shift. Van nurses rotate to keep proficient. If needed the charge nurse calls in an off-duty nurse to replace the absent van nurse.

The neonatal transport paramedic must be legally licensed as a paramedic by the state of Florida. He must also complete the Pensacola regional neonatal intensive care nursery transport paramedic training course and be certified by the director as competent to conduct neonatal transports. He must possess personal characteristics which enable him to remain calm, function objectively and independently under emergency conditions and be diplomatic for good public relations. He must be able to lift 75 pounds.

The neonatal transport paramedic training course includes a series of formal lectures introducing regional neonatal intensive care concepts, instruction in obtaining a history and performing physical examination of the neonate, diagnosis and treatment of common problems, familiarization with equipment and procedures, and cardiopulmonary resuscitation. The course includes handouts for each lecture with protocols for transport in general as well as for each commonly encountered disease or procedure. Practical instruction is obtained with at least two eight hour periods of handling babies in the NICU as well as van trips with certified transport paramedics. He must demonstrate proficiency in endotracheal intubation and placement of umbilical catheters and thoracostomy tubes.

Certification is obtained by successfully completing a written test based on lecture and handout material and a test van run accompanied by an neonatologist examiner. Continuing education is obtained by debriefing sessions with the neonatologist after each transport and formal instructions as desired by paramedics or deemed necessary by the neonatologist. Duties of the paramedic include:

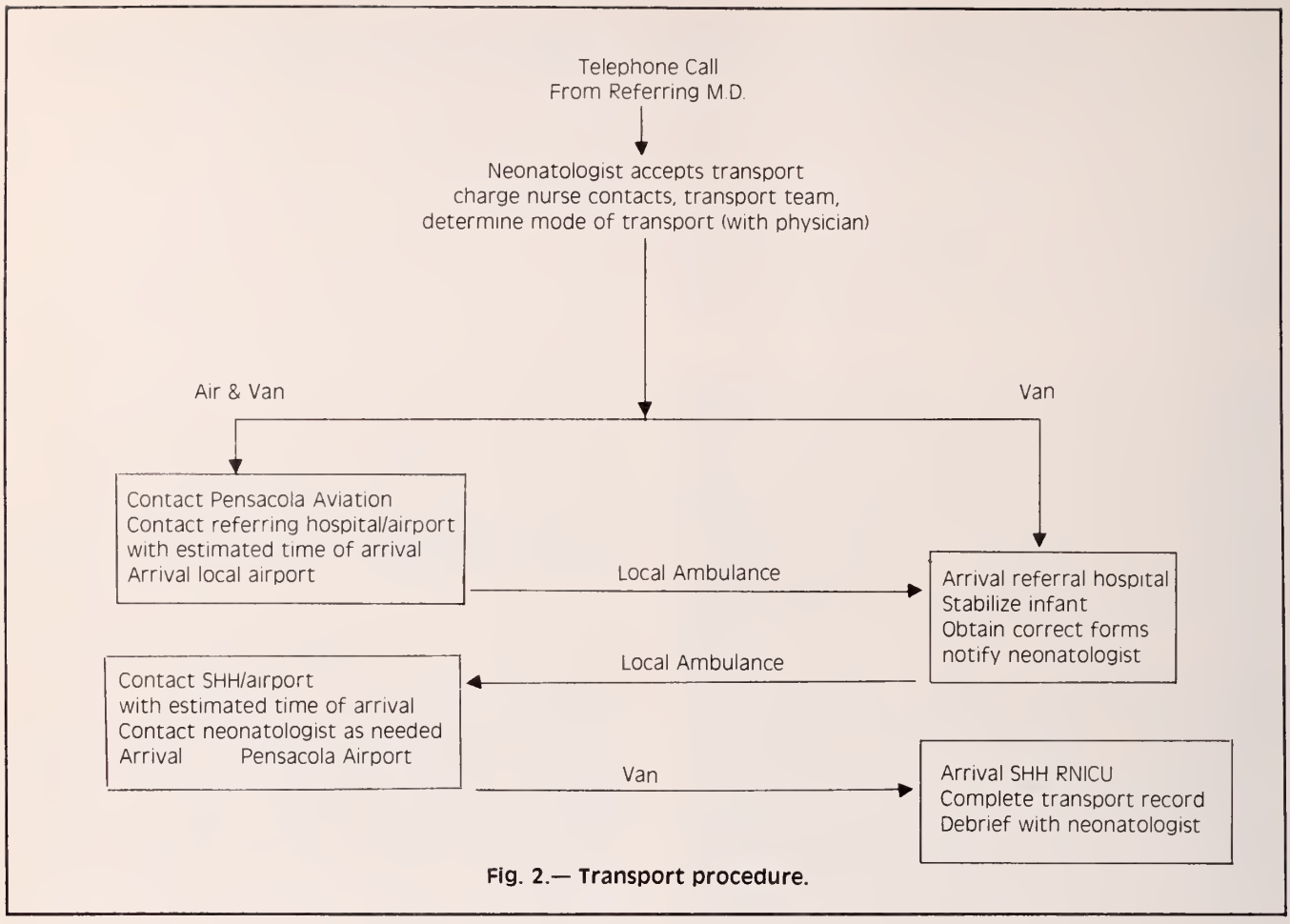


Fig. 2.— Transport procedure.

being immediately available during assigned working hours, insuring all medications are available and that equipment necessary for transport of neonate is functioning properly prior to departure, traveling to referring facility by van or aircraft, obtaining consent for treatment from one of the referred infant's parents or guardian, taking historical data, conducting a physical examination and stabilizing the patient according to established protocols, and contacting neonatologists on call before departure from the referring hospital to inform him of pertinent findings and condition and discuss therapy prior to departure. Additional duties include: insuring that the necessary written records, x-rays and laboratory reports as well as pathologic specimens are obtained to accompany patient, supervising and conducting safe transport of the neonate, conducting emergency resuscitation as need arises and continuing resuscitation until arrival at the RPICC, keeping accurate written records of all events of transport, and lastly debriefing with neonatologist immediately upon return to Sacred Heart Hospital.

Transport • The transport procedure utilized by the Sacred Heart Hospital RPICC is outlined in Figure 2. Transportation is initiated by a telephone call via direct line to the neonatologist. Departure is attempted within 30 minutes after the call. Teamwork is essential for an orderly and successful transport. When bed space is available transports from other regions are initiated through the statewide careline system. These transports are usually conducted using the referring region's transport system.

Results • The Sacred Heart Hospital Regional Neonatal Intensive Care Center referral area is noted in Figure 3. Transport distance (round trip) ranges from 8 to 364 miles and round trip time which includes downtime from 1 hour 40 minutes to 6 hours 15 minutes. Downtime which includes transport round trip time from local airport to local hospital for air transports ranges from 45 minutes to 3 hours. Total miles transported for 1982 was 31,995 at 88 miles/day.



Sacred Heart Hospital Regional Referrals 1982

Location	Hospital	Referrals	Round Trip Mileage Air/Van	Average Round Trip Time		Average Down Time	
1	University Hospital	21	8	1 hr.	40 min.		45 min.
	Baptist Hospital	18	9	1 hr.	40 min.	1 hr.	
	West Florida Hospital	14	9	1 hr.	40 min.		45 min.
	Naval Aerospace & Regional Medical Center	13	20	2 hrs.		1 hr.	15 min.
2	Santa Rosa Hospital	27	42	2 hrs.	45 min.	1 hr.	30 min.
3	Fort Walton General Hospital	9	89	3 hrs.	15 min.	1 hr.	
4	U. S. Airforce Regional Hospital, Eglin Air Force Base	16	102	3 hrs.	45 min.	1 hr.	15 min.
7	Bay Memorial Hospital	30	184/6	4 hrs.	45 min.	2 hrs.	30 min.
	Gulf Coast Hospital	19	184/4	4 hrs.	30 min.	2 hrs.	15 min.
	U.S. Air Force Hospital Tyndall Air Force Base	1	184/4	1 hr.	20 min.	I hr.	
8	Jackson Hospital	22	250/10	5 hrs.	30 min.	2 hrs.	
9	Calhoun General Hospital	5	250/60	5 hrs.	15 min.	2 hrs.	15 min.
10	Port St. Joe Hospital	1	184/96	5 hrs.	5 min.	2 hrs.	55 min.
12	Gadsden Memorial Hospital	17	320/6	5 hrs.		2 hrs.	5 min.
13	Tallahassee Memorial Hospital	13	340/24	6 hrs.	15 min.	3 hrs.	

Fig. 3.—Sacred Heart Hospital Regional Neonatal Intensive Care Unit Referral Area.

From January 1979 through December 1982 Sacred Heart Hospital Regional Neonatal Intensive Care Center received 1,238 neonatal transports. Table 1 shows neonatal outborn mortality from 1979 to 1981. These data compare favorably with inborn data of the same period (Table 2).

Acknowledgements

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References

1. Feldman, H., and Sauve, R.S.: Infant Transport Service, Clinics in Perinatology, (2):469-478, 1976.
2. Sumners, J; Harris, B.; Jones, B.; Cassady, G., and Wirtschafter, D.: Regional Neonatal Transport: Impact of Integrated Community/Center System, Pediatrics 6S:910-916, 1980.
3. Greene, T.: Organization of Neonatal Transport Services in Support of Regional Referral Center, Clinics in Perinatology, (1):187-195, 1980.
4. Chance, W., Derek, M.J.; Gash, J.; Williams, G., and Cunningham, K.: Neonatal Transport: Controlled Study of Skilled Assistance, Pediatrics, 662-666, 1978.
5. Hackel, A.: Medical Transport System for Neonate, 43(2):2S8-267, 197S.

Table 1.—Sacred Heart Hospital Regional Intensive Care Nursery Outborn Neonates, 1979-1981

Weight (gm)	Admissions	Deaths	Mortality (%)
500-999	67	42	62
1000-1499	144	20	14
1500-1999	164	17	10
2000-2499	156	6	04
>2500	411	27	07
Total	942	112	12

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Table 2.—Sacred Heart Hospital Inborn Statistics, 1979-1981.

Weight (gm)	Live Births	Admissions	Deaths	Mortality (%)	Mortality ICN Admissions (%)
500-999	58	58	38	65	65
1000-1499	107	107	21	20	20
1500-1999	156	146	3	1.9	2
2000-2499	276	128	5	1.8	3.9
2500 & above	3985	323	7	0.2	2.1
Total	4582	762	74	1.6	9.7

Florida's infant screening program for metabolic disease

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Editor's Note: This article consist of an introduction and three papers on different infant screening programs.

With availability of sophisticated high-tech data processing and near-molecular sensitivity tests for more than 200 metabolic disorders, one would think that a broad, efficient, cost-effective, package could be developed for mass newborn population screening. The ultimate in push-button prevention system programming would appear to be at hand. It is not.

What follows are a few of the factors considered in depth as Florida adopted its infant metabolic screening program, currently being applied to all in-state newborns (now over 140,000 per annum).

Purpose • Mass infant screening is undertaken in order to detect and then to definitively diagnose a congenital abnormality before the appearance of signs and symptoms that would make clinical diagnosis feasible. Only those conditions which, if untreated, would result in significant irreversible handicap should be eligible. The morality and ethics of virtually indiscriminate labeling are major considerations; many detectable metabolic abnormalities many not result in serious impairment of health or of intellect and in many others that do,no satisfactory therapy yet exists. On the other hand, there is clear evidence that certain treatable congenital conditions may produce irreparable brain damage by the time clinical signs appear and with which there appears to be a direct relationship between the degree of impairment and the interval prior to therapy. Four conditions — phenylketonuria, hypothyroidism, galactosemia and maple syrup urine disease — are well established examples.

Methods • The technology employed in such an undertaking must meet extremely rigid criteria of reliability. There must be a very low rate of false positives and virtually no false negatives. False positive tests result in an undesirable contribution to costs because of the necessity of retesting, but a substantial number of false negatives indicates a failure of the screen to detect affected infants and is not acceptable.

Both the efficiency and expense of mass screening relate to the ease of collecting the material to be tested as well as the simplicity and cost of analysis. In most states such testing is confined to heel-stick blood applied to filter paper, while in the interests of economy, quality control, efficiency of data management and ease of monitoring, analyses are performed by centralized laboratories processing a large volume of specimens.

Treatment • It would be futile and prohibitively expensive to conduct mass population screening in order to detect conditions for which there is no therapy of proven efficacy. The purpose of early

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screening is to allow the prompt application of treatment so as to avoid the often irreparable damage that may accompany the appearance of clinical signs. It follows that immediate access to effective treatment must be assured for every affected individual detected in the screen.

Economic impact • Finally, reasonable cost benefits must be anticipated. These must be arrived at through a comparison of direct program expenses with those medical, institutional and special educational costs likely to be incurred by affected individuals whose abnormalities remain undetected. As in any public health program, reliable estimates of the many intangible and indirect costs are difficult to come by. Even more uncertain is an adequate prediction of the cost of managing the undetected case as related to severity of the disease and to the resulting handicap. On the other hand the primary purpose of newborn screening is not economic, so favorable cost-benefit ratios, per se, should not be looked upon as the sole justification of the effort. Provided the fundamental principles of screening are expressed, such a program should represent an essential prevention component in our child health system, as does the immunization program, accident prevention or environmental control.

Program activities • The Florida Infant Screening Program was born of propitious legislation originally sponsored by Representatives Robert W. McKnight and Samuel P. Bell in 1979 as an expansion of the phenylketonuria (PKU) screening program, in place since 1965. The law prescribes that the Department of Health and Rehabilitative Services shall screen all infants born in Florida for certain metabolic, hereditary and congenital disorders, to be determined in consultation with the Infant Screening Advisory Council, also established by that statute.

The Council's activities represent collaborative planning involving the HRS Program Offices of Health (HPO), Children's Medical Services (CMS) and Developmental Services (DSPO), Florida's three medical schools, practicing pediatricians and consumer representatives. The product is a program, initiated in 1979 and applied statewide in 1980, that screens virtually all Florida newborns for phenylketonuria, hypothyroidism, galactosemia and maple syrup urine disease. It is difficult to find precedent for the degree of effective cooperation and imaginative planning that brought about that result.

The bureaucratic complexities of such an undertaking, formidable though they might have been, were skillfully managed through the constant cooperation of Drs. William W. Ausbon (CMS) and James T. Howell (HPO). Technical planning was carried out by Dr. Nathan Schneider (State Laboratory, Jacksonville) in consultation with representatives from the medical schools of the University of South Florida, University of Florida and University of Miami.

Blood specimens applied to filter paper are collected at 121 Florida hospitals or birthing facilities and mailed to the state laboratory where they are screen-tested for the detection of PKU, hypothyroidism, galactosemia and maple syrup urine disease. Negative results are mailed to the origin of the specimen with a copy to the infant's physician. Suspected abnormal results are phoned immediately to the facility submitting the sample, to the responsible physician and to the CMS Program Office (Tallahassee). Immediate contact then is made by CMS to one of the Florida Regional Genetics Centers located in each of the three medical schools. On occasion, county health units assist in the location of identified infants so as to insure access to prompt diagnosis and care. Each of the Genetics Centers maintain direct diagnostic and treatment facilities as well as follow-up and developmental evaluation services or provide consultation in diagnosis and management to primary physicians choosing to assume those responsibilities. Costs of initial management and long-term care are assumed by CMS for affected infants meeting CMS financial eligibility criteria.

Under the direction of Dr. William Ausbon of CMS since 1980, the Infant Screening Program in those three years has screened over 400,000 Florida newborns. This effort has resulted in the detection of 270 infants with abnormal tests for one of the four disorders, 103 of whom have been definitively diagnosed and treated. The cost of screening has been approximately $4 per infant, the total state expenditure over the 1980-82 period being $1,833,441 including the cost of definitive diagnosis and initiation of treatment of those infants detected.

The determination of an accurate cost-benefit ratio for the Program, of course, is impossible. Estimates of costs likely to be averted through identification of these disorders prior to appearance of clinical symptoms must take into account the anticipated number of those who otherwise would be severely handicapped, requiring institutionalization, as well as the number who might require only special education services and those only mildly affected, representing no cost burden. Two of the disorders, galactosemia and maple syrup urine disease, result in fatal outcomes if untreated, so terminal intensive care costs must be considered. In any event, a best rough estimate of cost averted by the 103 infants identified to date is some $22 million (lifetime), or the avoidance of about $12 of cost burden for each program dollar expended. Florida is now spending

TABLE 1.—Florida Infant Screening Program, January 1980-December 1982, Full Hospital Participation Complete April 1980.

DISORDER	POSITIVE TESTS	CONFIRMED DIAGNOSIS	PREDICTED INCIDENCE	ACTUAL INCIDENCE*
PKU	74	30**	1:18,000--1:13,000	1:13,700
HYPOTHYROIDISM	122	73	1:5,000	1:5,600
GALACTOSEMIA	33	10	1:50,000	1:41,000
MAPLE SYRUP URINE DISEASE	41	0	1:100,000--1:200,000	?
TOTAL	270	113		

*Live births (Florida Vital Statistics)
1980 - 131,811
1981 - 138,521
1982 - 140,000 (est.)

TOTAL ---- 410,300 (est.)

**Includes 10 infants with persistent hyperphenylalanemia

Infant screening samples processed by State Laboratory (Jacksonville):
Infants under 7 days ----- 424,455
All samples (including repeat analyses) ----- 585,921

approximately $17,800 per infant identified in the screen as having one of the four abnormalities. Had all of them awaited clinical diagnosis and had all escaped with only moderate retardation, for which institutionalization would be unnecessary, the very least educational expense predictable would be in excess of $100,000 per child, in addition to major health care costs. Less speculative, and far more important, is the impact of mental retardation on the lives and families of 103 children who will be able to avoid that unfavorable outcome. Table 1 summarizes the three-year experience of the Program. It must be pointed out that the first year of the screen was incomplete since full Florida hospital participation was not verified until April 1980.

That no cases of maple syrup urine disease were confirmed during the first three years of infant screening is not particularly surprising in view of its low incidence (estimated to be 1:100,000 to 1:200,000). Known for nearly three decades, the disorder is thought to be an autosomal recessively inherited defect in the oxidative decarboxylation of the branched-chain amino acids. Excreted in excess, these substances (leucine, isoleucine and valine) impart the characteristic maple syrup odor to the urine. Untreated infants usually exhibit nonspecific symptoms (poor feeding and apathy) during the first week after which neurologic signs appear in a downhill course with convulsions, coma and death within the next two weeks or so. Fortunately, there have been no reports of the disease in Florida infants since the screening program was initiated. However, there is no assurance that effective dietary therapy could have been instituted early enough to avoid permanent disability had a case been identified. The Infant Screening Advisory Council currently is reviewing recommendations that screening for this disorder be abandoned.

Acknowledgement

The author wishes to thank Dr. Janet Isaacs, HRS Children's Medical Services, for her efforts in preparation of the data reported here and in the three screening papers which follow.

Infant screening for phenylketonuria in Florida

Phenylketonuria (PKU) is an inherited metabolic disorder that causes neurologic defects and serious mental retardation. The metabolic defect results in a failure to convert phenylalanine to tyrosine (Fig. 1).

Phenylalanine hydroxylase is a mixture of three enzymes. In the normal individual all three isozymes are present and functional in the liver while in the patient with classical PKU they are nearly devoid of activity and phenylalanine accumulates behind the metabolic block. The high levels of phenylalanine (> 20 mg/dl) result in the increased production of phenolic metabolic products (phenylpyruvic, phenylacetic, O-hydroxyphenylacetic acid) that are found in high concentrations in the urine of PKU patients (Fig. 1).

In some cases one or more of the isozymes have appreciable activity and a milder variant of PKU results; these individuals can tolerate more protein (phenylalanine) in their diet and have a lower risk of having CNS damage than those with the classical form of the disease. A new type of hyperphenylalaninemia has been described in which phenylalanine hydroxylase is normal but the production of the enzymatic cofactor, tetrahydrobiopterin, is defective. This defect results in hyperphenylalaninemia that responds to low phenylalanine diet but the neurologic symptoms are unchanged. The administration of biopterin without phenylalanine restriction is required both to lower the amino acid level and to prevent the neurologic complications.

Early treatment of PKU is of great importance. When treatment is instituted prior to three to four weeks of age normal development may be anticipated; however, when treatment is delayed until the second month or later, IQ test scores at four years are lower than those of unaffected siblings. If treatment is begun before clinical symptomatology is evident, retardation and other long-term neurologic sequelae are avoided.

Since PKU is known to occur in one of every 8,000 to 13,000 live births, the screening procedure for this infrequent disorder must be inexpensive, easy to perform and provide no false negative results. Dr. Robert Guthrie developed a bacterial inhibition screening test that is generally used to detect hyperphenylalaninemia; the test costs about $1/patient and allows easy measurement of a large volume of samples. The weakest aspect of the test is a risk of false negative results that increases as more babies are discharged from the hospital before three days of age. The test provides the highest yield of positive results when the samples are collected after the baby has had at least 24 hours of adequate protein intake. Results from a large group of proven PKU patients indicate that maximal levels of phenylalanine occur between six and ten days and that the peak occurs later in females than males. With these shortcomings in mind, the Department of Health, Education and Welfare, American Academy of Pediatrics and Florida Infant Screening Program have included in their standards the following policy:

1. The initial specimen should be obtained at least 24 hours after adequate formula ingestion, and as close as possible to the time of nursery discharge, but no later than 14 days after birth. If the baby is discharged before 24 hours of milk feeding, the test should still be obtained, but

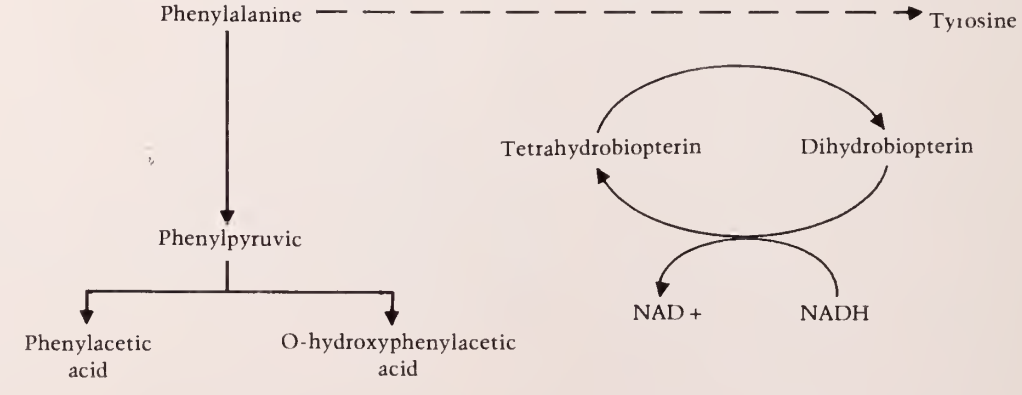


Fig. 1.—Metabolism of Phenylalanine

arrangements should be made with the parents to have the baby retested during the second week of life.

2. A follow-up test should be carried out when the infant is 1-4 weeks old, particularly when the first test was obtained before the fourth day of life.

The ideal time for PKU screening is five to ten days of age, but early discharge makes this impossible, necessitating careful neonatal follow-up during the second week of life.

The experience of the state laboratory for the interval January 1980 (before 100% participation) until February 1983 is 20 confirmed PKU patients and ten phyperphenylalanine variants. During the year January 1 to December 31, 1982, 142,456 first specimens were received which provided 29 positive test results. Further evaluations of the positive screens at the three Regional Centers (University of Miami, University of South Florida, and University of Florida) confirmed two classical PKUs and 13 hyperphenylalanine variants. This is an incidence of 1:9,497 which compares well with other reports. The 13 variants require careful follow-up to insure that the first diagnosis is accurate and that dietary management is appropriate so as to avoid possible brain damage. The finding of only two subjects with classical PKU was unexpectedly low and raises the question of whether the screen failed to detect cases.

The number of PKU cases missed since development of the current screening program is unknown. Two children with the disease were discovered in late 1982 and early 1983 who were undetected in Florida but before the statewide program became mandatory. In the first of these, hospital discharge occurred before the child had consumed enough milk, the initial screen was never performed and follow-up was not undertaken. The child was later diagnosed in the course of a work-up for mental retardation at age three years. The second child was missed during the neonatal period even though a blood sample was collected and, unfortunately, the diagnosis was not established until the age of five years when a younger sibling was identified by the present infant screening program.

The reality that PKU patients may have been missed despite neonatal screening and that early discharge of the neonate magnifies that risk should alert all physicians caring for infants. The Guthrie PKU screening test should be obtained on all children at the first follow-up visit after discharge from the hospital, ideally, ten to 14 days after delivery. If this test is positive, the child should be referred immediately to the nearest Regional Genetics Center for the more definitive quantitation of serum phenylalanine and tyrosine levels. Phenylalanine in excess of 20 mg/dl on two successive days, with low or normal tyrosine levels, makes the diagnosis of PKU. When that diagnosis is made, diet therapy should be instituted immediately so that one may achieve metabolic control before CNS symptoms appear which suggest CNS damage. Those children with hyperphenylalaninemia (phenylalanine levels of 5 to 20 mg/dl) also should be evaluated by one of the three Regional Genetics Centers and plans for treatment and follow-up established.

The natural history of untreated PKU is the development of moderate to profound mental retardation. It has been estimated that neonatal screening for PKU before four days of age will not detect 5% to 10% of affected infants, but follow-up testing at ten to 14 days should make the yield approach 100%. Cooperation with the statewide program by conducting follow-up testing is essential if we are to avoid missing any child with this treatable problem.

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Infant screening for galactosemia in Florida

Classical galactosemia is an autosomal recessive inborn error of metabolism caused by a complete deficiency of the enzyme, galactose-1-phosphate uridyltransferase (GALT). Natural milk sugar, lactose, is the primary source of dietary galactose and the normal metabolic sequence in the utilization of this carhohydrate (the galactose pathway) requires five different enzymes. GALT is an essential step in this pathway which converts galactose to glucose since it is well recognized that GALT deficiency leads to failure to thrive with vomiting, diarrhea, and hepatosplenomegaly as the early symptoms, with progression to cataracts, mental retardation, and death in the untreated infant. Galactosemia meets all the criteria for infant screening since a small spot of dried blood on absorbent paper can be effectively used to measure GALT activity, the frequency of the disease is high enough to be cost-effective, and the disease can be effectively treated by simply removing sources of galactose from the diet. When identified and treated within the first few weeks of life, growth and development are usually normal.

Screening for galactosemia is unique in that the test measures GALT enzymatic activity directly in the dried red blood cells rather than the measurement of an accumulated intermediary metabolite as

phenylalanine in the detection of PKU or elevated branched-chain amino acids as an indicator of maple syrup urine disease.

The State Laboratory (Jacksonville) has become proficient in using a modification of the Beutler assay wherein RBC GALT is semiquantitatively measured by estimating the amount of a fluorescent compound which is produced only when GALT is active. Therefore, "O FLUORESCENCE" or "NO FLUORESCENCE" strongly indicates that GALT activity is absent and that an infant may have galactosemia. When fluorescence is detected, it is compared to several control samples which are formulated to produce normal levels of GALT activity (100% fluorescence) as well as half-normal levels (50% fluorescence). When obvious fluorescence is present and the level is estimated to be less than 50%, GALT deficient galactosemia effectively has been ruled out but the result is reported as "PARTIAL FLUORESCENCE" rather than normal, a result which many have encountered.

The genetic transmission of galactosemia is well established. The most common gene for GALT is referred to as the wildtype or normal gene "N". Therefore, N/N individuals are homozygous, have two normal genes, and their blood shows 100% fluorescence on screening. Exceptions relate to a number of physical factors including improper collection of blood specimens. Exposure to oxidative agents or heat, improper drying prior to packaging, and delayed transit to the laboratory, alone or in combination, may have a significant effect on the integrity of the GALT enzyme which is to be measured. To add to the confusion, at least two other genes in the population can produce reduced levels of GALT activity. The next most common gene is the Duarte variant discovered at the City of Hope in Duarte, California, and referred to as "D", produces about ⅓ the GALT activity of the "N" gene. About 5% of the population are carriers of the Duarte gene with the genotype N/D, showing fluorescence levels about 66% of normal. The gene of greatest concern is termed the "G" gene and produces no GALT activity. When it is homozygous (G/G), classical galactosemia and no fluorescence results. Both parents of the G/G infant must be carriers of the "G" gene and bear the genotype, N/G. Such carriers would be expected to have 50% fluorescence in the infant screening test.

Assuming that blood collection, transport, testing and other factors are controlled, the levels of fluorescence expected for the relevant genotypes in the population are as follows:

N/N	100%	fluorescence
N/D	66%	"
N/G	50%	"
D/D	33%	"
D/G	25%	"
G/G	0%	"

The primary intent of the infant screening program is to identify G/G infants and begin dietary therapy soon enough to prevent the onset of galactose toxicity which may have an early fatal outcome. However, levels of fluorescence at or below 50% identify with high probability both D/G and N/G individuals who will not have the disease themselves but will be at a significantly increased risk for producing galactosemic infants in the next generation. More important is that every N/G infant identified by the screening program must have an N/G parent. Based on the current frequency of galactosemia in Florida, the probability is about one chance in 85 that both parents will be N/G carriers and at a 25% risk for galactosemia in future pregnancies.

Table 1 shows the accumulated data for the period from January 1, 1980 through March 1, 1983 for all infants and their families referred to the USF

TABLE 1.—Florida Galactosemia Infant Screening Follow-up Data, Total RBC GALT Assays Performed January 1, 1980 Through March 1, 1982, USF Pediatric Laboratories.

Genotype	Infants	Fathers	Mothers	Relatives	Totals
N/N	96	105	127	11	339
N/D	36	27	33		96
N/G	96	34	50	6	186
D/D	5	1	1		7
D/G	15	4	1		20
G/G	10				10
TOTAL	258	171	212	17	658

N = Normal Gene
D = Duarte Variant Gene
G = Galactosemia Gene

Number of Individuals Identified with a Galactosemia Gene
INFANTS: 120/258 = 46.5% ALL TESTED: 216/657 = 32.99%

Pediatric Laboratories for follow-up testing. Of the 258 infants who had at least two partial fluorescence results, 111 infants (96 N/G + 15 D/G) were found to be carriers of a "G" gene. These data predict that any infant with more than one partial fluorescence results has at least a 43% chance of carrying the gene for galactosemia.

A total of ten galactosemic infants were identified during the three-year, two-month period out of a total of 620,310 screening tests performed. This volume includes a substanial number of repeat unsolicited screening tests, so accurate incidence figures cannot be determined from these data. However, a safe estimate, using state vital statistics, is that galactosemia occurs in Florida with a frequency of 1 in 41,000 to 50,000 births. This predicts a carrier frequency of 1 in 80 to 90.

Screening for galactosemia in this state has been both accurate and effective. We are not aware of a galactosemic infant missed by the screening program. The methodology employed makes it highly unlikely that this could occur with but one exception. A galactosemic baby who receives a transfusion for any reason may have a normal or partial fluorescence result because the blood donors' RBC GALT would be measured. Therefore, it is advisable to collect infant screening samples prior to any transfusion. Otherwise, testing for galactosemia must be delayed three to four months.

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Clinical experience with the infant screening program for congenital hypothyroidism

Since 1980 the Florida Infant Screening Program has allowed the detection of a number of newborn infants with abnormally low serum concentrations of thyroxine (T4) or elevated concentrations of thyrotropin (TSH). This paper describes the clinical experience of the three Regional Genetics Centers with infants with whom there was contact through this program between January 1, 1980 and December 31, 1982.

The following definitions are presented:

Primary congenital hypothyroidism indicates persistently subnormal serum concentrations of T4 and elevated values of TSH. This disorder may be permanent or transient and may be due to abnormalities of thyroid gland embryogenesis, to inborn errors in thyroxine biosynthesis or to maternal ingestion of antithyroid agents. In many instances the etiology may be undetermined because diagnostic studies are inconclusive or because insufficient diagnostic evaluation is undertaken prior to treatment. The disorder is considered persistent or permanent if a structural or biochemical abnormality is identified or if, on follow-up, hypothyroxinemia and hyperthyrotropinemia persist. It is considered transient if thyroid function returns to normal after treatment is discontinued.

Secondary hypothyroidism implies an abnormality of secretion of TSH due to pituitary or hypothalamic dysfunction or to functional immaturity of the pituitary-thyroid axis.

Hypothyroxinemia indicates persistently low serum T4 values, normal TSH concentrations and no abnormality of thyroid hormone binding by serum proteins. This entity may be associated with illness or low birthweight in infants.

HypoTBGemia is associated with low total but normal free T4 concentrations and is of no functional significance.

Hyperthyrotropinemia implies transiently or persistently elevated concentrations of TSH, normal thyroxine levels and no evidence of an inborn error in thyroxine biosynthesis or of exposure to an antithyroid agent. Some of these children may have subtle inborn errors of thyroxine biosynthesis which as yet are unidentified because of incomplete evaluation.

University of South Florida • Fifty-one patients were brought to the attention of this Center through the neonatal screening program.

Of the 19 patients with persistent primary congenital hypothyroidism, nine were females. Three of seven patients with primary hypothyroidism of undetermined etiology had low birthweights (680-1300 g) and were critically ill. Two died prior to further evaluation and may represent a transient form of the disorder. The type of inborn error of thyroxine biosynthesis suspected in one patient has not yet been identified. Transient hypothyroidism was recorded in two low birthweight infants (818, 1180 g) and may represent functional immaturity of the pituitary-thyroid unit. One infant female was gravely ill with respiratory distress syndrome; she was found to have persistently low T4 and high TSH values prior to hospital discharge at 70-80 days of age. After two years of treatment with thyroxine, therapy was discontinued; she remains euthyroid clinically and chemically. In three infants, congenital hypothyroidism was due to maternal ingestion of propylthiouracil.

In 21 of 25 infants with congenital hypothyroidism thyroxine therapy was started between nine and 80 days of age (median 15 days). Treatment was initiated in 16 infants before 19 days of age and at

36, 41, 46, 70 and 80 days in the remaining infants, the majority of whom were either of low birthweight or ill. Delayed testing of one infant resulted from collection difficulties. Four infants were not treated either because the hypothyroid state remitted before therapy or because they succumbed to associated illnesses. With treatment, growth and development (assessed informally) were reasonable but definitive developmental evaluation has not as yet been undertaken.

Hypothyroxinemia was noted in four full-term well infants on the initial screen. Subsequent studies were normal. Deficiency of TBG was identified in nine male infants, consistent with the X-linked mode of genetic transmission.

Transiently-elevated TSH concentrations were recorded in seven infants; in two neonates this was noted on the first day of life, coincident with the neonatal TSH surge. In the other infants, no cause for the TSH increase was noted. None of these infants was treated and TSH concentrations returned to normal within 20 days. In three patients, increased TSH values persisted over several weeks but were associated with normal T4 levels, thyroid scans and bone age. Two infants were started on thyroxine at 30 and 32 days of age and following 1.5-2.0 years of treatment the TSH concentration remained elevated after treatment was discontinued. One infant was observed without treatment for one year after which TSH values remained elevated but growth, development and skeletal maturation progressed normally.

One infant was referred following a clerical error in recording the T4 value. It was reported as 4.2 ug/dl; the correct value was 14.2.

University of Miami • Fourteen of the 15 infants with congenital hypothyroidism evaluated in this institution had a primary disorder and one had secondary hypothyroidism. In this male infant, the screening T4 concentration was 6.0 ug/dl and repeat specimens were 5.4 and 6.5 ug/dl at nine and 21 days respectively. At 79 days the infant had a slightly enlarged tongue and large fontanelles. Despite treatment with thyroxine, no increase in growth rate was noted. At eight months the boy had no growth hormone secretory response to insulin-induced hypoglycemia. Cortisol secretion in response to hypoglycemia and 1-24 ACTH was normal. At eight months the patient's motor development was delayed.

During the three-year period, five infants with hypoTBGemia were detected.

Treatment of the 14 infants with primary congenital hypothyroidism was initiated between 12 and 56 days (median 14-15 days). The majority have grown normally and appear to be progressing satisfactorily, although formal developmental evaluation has not been undertaken as yet.

University of Florida • Twenty-seven infants (22 females and five males) were considered to have hypothyroidism. Each had elevated concentrations of TSH indicating primary thyroid dysfunction. Twenty four of the 27 infants were treated; of the remaining three, one died in the nursery and two could not be traced.

The range of age for beginning therapy was two to 84 days, the mean age being 18.8 days. Follow-up statural growth data were available for 15 infants of whom 13 were progressing normally; the two whose growth was subnormal were treated at 42 and 84 days. Informal assessment of development was recorded for 14 of the 24 treated infants; 11 appeared normal; one, treated at 15 days, had a possible delay and the two treated at 42 and 84 days were considered very slow.

Comment • The clinical experience of the three Centers appears reasonably similar except that athyrotic primary congenital hypothyroidism was recorded more frequently at the University of South Florida. In the first series, radioscans (123-I or pertechnetate) were performed at many different hospitals and the results reported to the investigators. It may be that more uniform scanning procedures would have disclosed ectopic thyroid tissue in a larger number of infants.

The incidence of hypoTBGemia in this series was one half that of persistent primary congenital hypothyroidism and should be recognized only as nondisease. The relatively frequent occurrence of elevated TSH concentrations in the first few days of life probably reflects variable maturation of the pituitary-thyroid axis. Inasmuch as TSH levels are known to be elevated in the first day of life (except in cord sera), data from that day should be interpreted cautiously and studies repeated at three to five days of age. The etiology of the persistently elevated TSH concentrations in three infants is unknown but may reflect a subtle inborn error in thyroxine biosynthesis, "end organ insensitivity," to TSH or the presence of a biologically inactive TSH molecule. Further studies are required to differentiate these possibilities.

The primary goal of the neonatal screening program is to detect and treat infants with congenital hypothyroidism as early as possible in order to avoid mental retardation. Clinically, the majority of affected infants have progressed normally but formal evaluation and prolonged follow-up will be necessary before the effects of early treatment on cognitive development can be adequately documented.

The urgency of early therapy is supported by the recent report of the experience in Canada.[1] Formal developmental testing at age 18 months revealed significantly lower scores in the hypothyroid group. These differences were sustained at 36 months. However, the mean score for the treatment group was still greater than 100 and only nine of 45 were below 85. Further testing at older ages is necessary to access long-term cognitive development, but the results indicate that early treatment of hypothyroidism is highly beneficial. These results provide adequate vindication of early diagnosis through a system of mass screening.

Reference

1. Glorieux, J.; Dussault, J.H., and Letarte, J., et al: Preliminary Results on Mental Development of Hypothyroid Infants Detected by Quebec Screening Program, J. Pediat. 102:19, 1983.

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The ductus arteriosus: why and how to manipulate its patency

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ABSTRACT: Patency of the ductus arteriosus can be alterated by manipulating the prostaglandin system. In premature infants, when persistent ductal patency results in a large left to right shunt, the ductus can be constricted by treatment with the prostaglandin synthetase inhibitor, indomethacin. Term infants with congenital heart disease, in whom either pulmonary or systemic perfusion depends upon ductal patency, can be treated with intravenous prostaglandin E_1. PGE_1 maintains ductal patency and thus palliates the infant until a definitive diagnosis can be made and surgery can be accomplished.

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The ductus arteriosus is a fetal great vessel that connects the pulmonary artery to the descending aorta. In fetal life the ductus functions as a bypass channel for the constricted pulmonary circulation, permitting blood pumped from the right ventricle to pass directly to the placenta for oxygen and carbon dioxide exchange. Following normal birth and the infant's first breath, multiple physiologic changes occur within seconds. Oxygen enters the alveoli, diffuses into the pulmonary capillary bed, and relaxes pulmonary vascular smooth muscle. Pulmonary vascular resistance declines by half while pulmonary venous oxygen tension increases three to four fold. Oxygenated arterial blood then enters the aorta. Due to the rapid decline of pulmonary vascular resistance and therefore pulmonary arterial pressure, flow through the ductus arteriosus reverses, moving from the aorta into the pulmonary artery. The ductus constricts in response to elevated oxygen tension, and two circulations are established. Complete anatomic closure of the ductus usually follows by age two to four days,[1] but prior to that, the channel can reopen if hypoxemia develops.

The normal course of perinatal events is altered, for different reasons, when infants are born prematurely or when congenital cardiac disease exists. The premature infant's ductus frequently fails to close, at times resulting in a large left to right shunt. This may cause pulmonary edema and/or congestive heart failure thus complicating the treatment of patients with hyaline membrane disease.[2] The infant with congenital heart disease, on the other hand, may have its ductus arteriosus close normally only to become profoundly hypoxemic if a right heart obstructive lesion exists, or to suddenly develop low-output shock if left heart obstruction prevents adequate systemic perfusion. Thus in pathologic situations, it would be desirable to be able to manipulate ductal patency by closing it in some cases and by keeping it open in others.

Anatomy and physiology of the ductus arteriosus • In early fetal life, the ductus arteriosus is structurally similar to the aorta and pulmonary artery with an intact and clearly defined layer of medial smooth muscle and an internal elastic lamina. As gestation progresses, the ductus develops degenerative changes with disruption of the elastic lamina, cytolytic necrosis of the medial smooth muscle and intimal proliferation into "cushions" which partially occlude the lumen and facilitate functional obstruction with moderate constriction. Although these changes tend to progress with advancing gestational age, individual variability is marked and no specific gestational age can be clearly associated with a specific anatomic change[3] (Fig. 1).

Functionally, ability of the ductus arteriosus to constrict in response to raised oxygen tension also develops with advancing gestation. In fetal lambs of 90 days gestation (.61 of gestation, equal to 24 weeks gestation in humans) the ductus is unresponsive to even 100% oxygen. At .73 gestation (equivalent to 29 weeks in humans), a small constrictor response to high oxygen occurs. This constrictor response progressively increases in magnitude until term when constriction threshold occurs at normal postnatal arterial oxygen tensions.[4] Others have confirmed this phenomenon in fetal animals of others species.

As recently as 1975, although descriptive work had shown that both oxygen tension and gestational age influenced patency of the ductus arteriosus and its closure postnatally, the underlying biochemical control mechanisms that effected closure were generally unknown.[5] Major surgical procedures were necessary to eliminate the ductus in prematures[6] or to maintain its patency in infants with congenital heart disease.[7] At about the same time, the use of indomethacin, a prostaglandin synthetase inhibitor, to halt premature labor was noted to be associated with a 10% fetal death rate.[8] This observation, coupled with the discovery in 1973 that prostaglandins profoundly influenced tension development in isolated ductus strips,[9] led to experiments in rats which proved that maternal indomethacin caused fetal ductus arteriosus constriction in utero.[10] Thus it was established that ductus arterosus patency is controlled by endogenous production of prostaglandins.

Once this association was recognized, the potential for pharmacologic treatment of a persistently patent ductus arteriosus in premature infants by use of aspirin[11] and indomethacin[11,12] was evaluated in clinical trials in several neonatal care centers across the country.[13] As clinical experience accumulated, the initial reported success rate of 75% to 100% could not be duplicated by some researchers.[14,15] The apparent discrepancy was explained when McCarthy and colleagues[15] noted a marked inverse association between responsiveness to therapy and postconceptual age of the infant at the time of treatment (Fig. 2). Younger infants (28-32 weeks) treated prior to 32-33

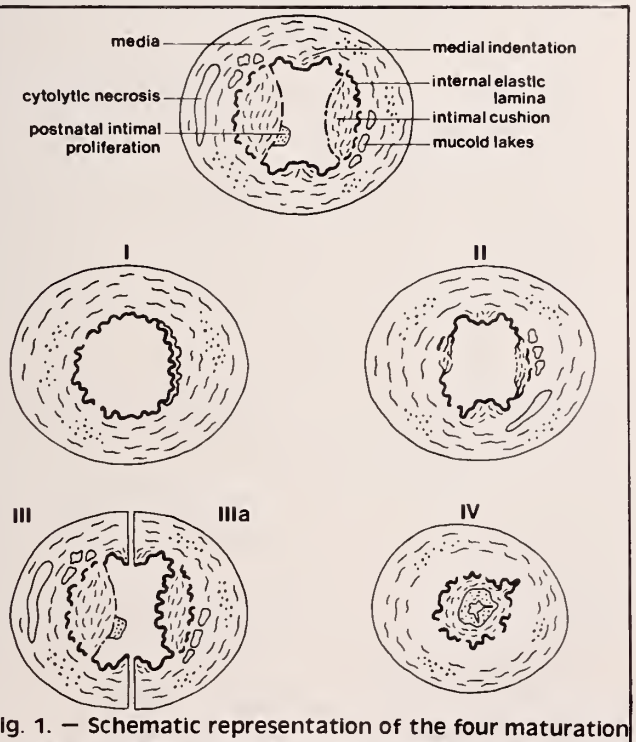


Fig. 1. — Schematic representation of the four maturation stages. Stage IIIa indicates the structure of an adnormal ductus with permanent (persistant) patency.

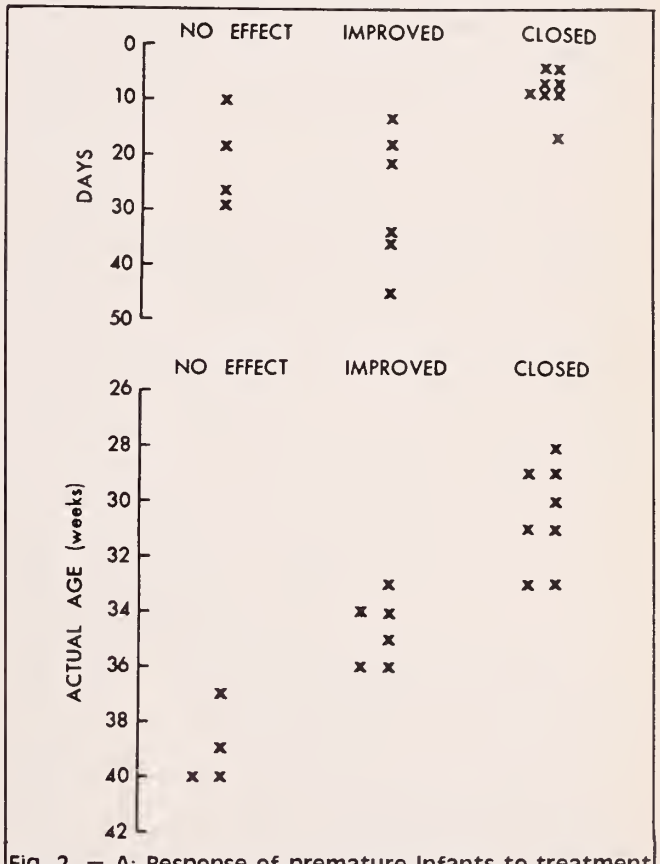


Fig. 2. — A: Response of premature infants to treatment with indomethcin versus chronological age at the time of treatment. B: Response to the same patients to indomethacin versus postconceptual age (gestational + chronological age) at time of treatment. Reproduced with permission from McCarthy et al, Pediatrics 62:706, 1978.[15]

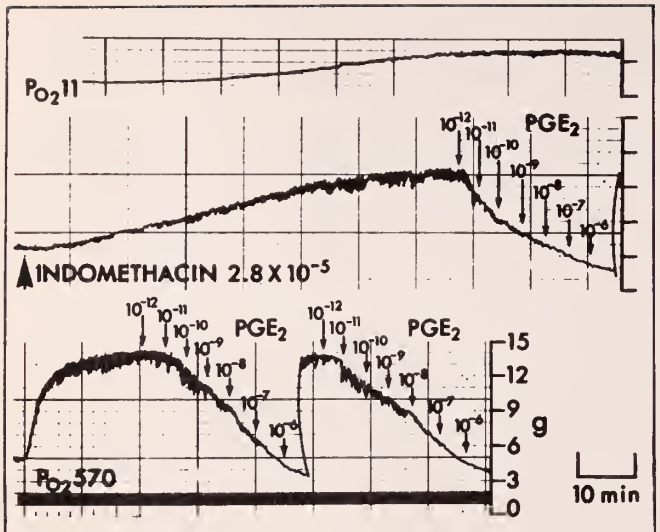


Fig. 3. — Responses of isdated perfused rings of near-term lamb ductus arteriosis to indomethacin, hyperoxia, and prostaglandin E_2. Note the increase in muscle tension as result of indomethacin treatment and the intense and consistant relaxation response to PGE_2 at high PO_2, and with indomethacin induced constriction. Reproduced with permission from Coceani et al, Prostaglandins 9:299, 1975.[19]

weeks postconceptual age had ductal closure. Those 33-36 weeks generally had a partial response and those older than 36 weeks at time of treatment failed to respond. Animal experimentation[16] subsequently confirmed the clinical hypothesis that the ductus arteriosus matures bioehemically as well as anatomically through late gestation. The bioehemical maturation of prostaglandin responsiveness can be aeeelerated by administration of exogenous corticosteroids to the mother prior to delivery.[17] Thus, the decreased incidence of "HMD" reported in premature infants born after steriod administration to mothers may actually relate to decreased left-to-right duetal shunting as well as to increased surfactant produetion.[18]

The opposite consideration, namely, maintenance of duetal patency in term infants with congenital heart disease, has also proven to be possible. In 1975, Coeeani et al showed that rings of duetus tissue contracted by either indomethaein or oxygen had dose dependent relaxation when prostaglandin E_2 was added to the tissue perfusion fluid (Fig. 3).[19] Within months after animal experimenatation confirmed that E-series prostaglandins could also dilate the duetus arteriosus in vivo,[20] the first clinical report was published showing improvement in systemie oxygenation after PGE_2 infusion into human neonates with eyanotic eongenital heart disease.[21] This suecess was followed by rapid publication of many studies, eaeh eonfirming efficacy of PGE for palliation of various forms of congenital heart disease.[22-27] After several years of clinieal trials, a commerical preparation of prostaglandin E_1 (Prostin VR-Pediatric, Upjohn Co.) was approved by the FDA and released for general use in neonates in Deeember 1981, approximately nine years after the laboratory diseovery of prostaglandin's role in regulating ductal patency.

Pathophysiology of left to right shunt in premature infants with a patent ductus arteriosus (PDA) • The consequences of a PDA in an infant depend upon the volume of shunt (which depends in turn upon ductal size and the pulmonary vascular resistance relative to systemic vascular resistance), the infant's myocardial reserve, and associated conditions. Likewise, symptomatology is variable, ranging from none to complete cardiovascular eollapse. Table 1 outlines the findings most frequently associated with significant ductal shunts. Left to right shunt and congestive heart failure both cause an increase in pulmonary interstitial fluid. This fluid decreases pulmonary compliance[28] and causes tachypnea, expiratory grunting, intercostal retractions, CO_2 retention, apnea, bradyeardia, and ventilator dependency. Congestive heart failure stimulates neural and neurohormonal compensatory mechanisms which are manifested clinically by tachyeardia, hyperdynamie precordium, salt and water retention, edema, hepatomegaly and gallop rhythm. The open duetus ereates a systemic vaseular "steal" distal to the exit of aortic arch vessels.[29] Decreased lower body perfusion if frequently associated with abdominal distention, decreased urine output, decreased femoral pulses in the presenee of an increased right brachial

TABLE 1.—Symptoms of a Large Patent Ductus Arteriosus.

SYMPTOM	PHYSIOLOGIC CAUSE
↑Respiratory Rate Expiratory Grunting Intercostal Retractions	↑Pulmonary Interstitial Fluid
CO_2 Retention/Respiratory Failure Ventilator Dependency	
Tachycardia Gallop Rhythm Hepatomegaly (Infrequent) Peripheral Edema (Rare)	Congestive Heart Failure
Bounding Pulses	Large Diastolic Runoff
Abdominal Distention Ileus ↓ Urine Output ↓ Femoral Pulses with ↑ Upperbody Pulses	↓Lower Body Blood Flow
Metabolic Acidosis ↓ Cerebral blood flow	Systemic Ischemia

pulse, ileus and necrotizing enterocolitis.[30] A generalized decrease in systemic perfusion may be reflected in development of a metabolic lactic acidosis and decreased cerebral perfusion.[31] The profound systemic and pulmonary consequences of a large patent ductus arteriosus contribute to prolongation of hospitalization, increased costs, and development of many complications[32] in the small premature infants who most frequently have failures of ductal closure.

Diagnosis of a patent ductus arteriosus is sometimes difficult due to the hour to hour variability in shunt and to intercurrent pulmonary disease and ventilator therapy. Recently a diagnostic scheme has been developed and validated by the multicenter group studying the efficacy of indomethacin.[33] By use of physical examination, chest x-ray, history of increased ventilator requirements, echocardiogram, and by following the outlined scheme, a hemodynamically significant ductus arteriosus can be accurately diagnosed in nearly every case. Recently, use of range gated-pulsed Doppler flow measurements in either the aorta or the brachial artery has also been a useful addition to the diagnostic armamentarium.[1,34]

It is now generally agreed that in symptomatic premature infants early ductal closure constitutes appropriate therapy. Prophylactic use of indomethacin for <1000 gm infants has decreased mortality and morbidity,[35] as has ductal closure immediately after diagnosis using either indomethacin[36] or surgery.[36,37] Use of indomethacin is contraindicated in infants who have significant hyperbilirubinemia, renal dysfunction, evidence of necrotizing enterocolitis, sepsis, or coagulopathies resulting in overt bleeding. The recommended dose is 0.1 to 0.3 mg/kg orally in one daily dose. This dose may be repeated in 8-12 hours if only a moderate response occurs. Maximum total dose is 0.6 mg/kg. Surgical results reported from multiple centers are excellent with far less than 1% mortality and minimal morbidity in centers where appropriate surgical and anesthetic expertise, and pediatric cardiology and neonatology consultation are available.[37]

Use of prostaglandin E_1 for temporary palliation of congenital heart disease • In utero, the fetus has two pulmonary bypass channels, the foramen ovale that provides left heart flow and the ductus arteriosus that allows bypass of the constricted pulmonary vascular bed. Because of these bypass channels, the fetus in utero can grow and develop normally with only two cardiac chambers and one great vessel. However, once the baby is born, the lungs must be perfused and pulmonary venous return must reach the systemic circulation in sufficient volume to permit survival. Infants born with severe congenital heart disease usually become symptomatic within hours to days of birth. In some congenital heart defects, such as pulmonic atresia or aortic atresia, survival is not possible unless the ductus arteriosus remains widely patent. In other defects, such as transposition of the great vessels or severe coarctation of the aorta, continued ductal patency may also be quite beneficial.

Right sided obstructive lesions • Generally, these conditions (Table 2) are associated with decreased pulmonary perfusion, manifested by decreased pulmonary vascularity with a small or normal sized heart on chest x-ray and intense cyanosis unresponsive to increased inspired oxygen tension. Infusion of prostaglandin via any peripheral route at a dose of 0.05 to 0.1 microgram/kg/min usually results in prompt increase of PaO_2. This can stabilize the infant for transport to a cardiac center for definitive diagnosis, and surgery.[23,24]

Left sided obstructive lesions • In the presence of left heart obstruction, systemic perfusion occurs primarily via the ductus arteriosus (Table 2). When the ductus closes, blood flow distal to the level of obstruction decreases further. The right heart output floods the lungs causing the rapid development of pulmonary edema. Thus an infant with left heart obstruction who frequently appears healthy prior to ductal closure typically develops rapid onset of

TABLE 2.—Congenital Heart Lesions That Can Be Palliated With PGE_1.

Right Ventricular Obstruction Pulmonary Blood Flow is Ductus Dependent	Left Ventricular Obstruction Systemic Blood Flow is Ductus Dependent
• Pulmonary Atresia (with or without VSD)	— Interrupted Aortic Arch
• Severe Pulmonic Stenosis — Tricuspid Atresia	— Critical Coarctation of Aorta — Critical Aortic Stenosis — Hypoplastic Left Heart Syndrome (Aortic or Mitral Atresia)
INADEQUATE MIXING TRANSPOSITION OF THE GREAT VESSELS	

grayish pallor, severe tachypnea, low blood pressure, absent pulses, marked hepatomegaly, and renal shutdown. Reopening the ductus with prostaglandin infusion rapidly reverses the symptoms of cardiovascular collapse, permitting transport, complete diagnosis, and surgical intervention, if appropriate.[26]

Transposition of the great arteries • When the great vessels are reversed, two parallel pumps exist with each pumping a closed circuit. Oxygenation, and ultimately survival, depends upon mixing of blood between the two circuits. Clinical symptoms are usually those of severe systemic cyanosis, normal or increased pulmonary arterial vascularity on chest x-ray, and mild to moderate cardiac enlargement. In simple transposition of the great arteries, mixing occurs across the foramen ovale. If the ductus arteriosus is patent, additional mixing takes place. Therefore, maintenance of ductal patency will facilitate safe transport to a catheterization facility. Palliation by a balloon atrial septostomy usually is effective in increasing intracardiac mixing sufficiently to permit adequate systemic oxygenation. Occasionally some infants fail to improve after balloon septostomy. Such failure is thought to be due to inadequate atrial mixing possibly secondary to elevated pulmonary vascular resistance. These infants also improve when prostaglandin is infused.[27] The improvement probably is caused both by increased ductal mixing and by moderate lowering of pulmonary vascular resistance, a side effect of PGE_1.[38] Usually prostaglandin therapy in these infants can be gradually decreased late in the first week with stable systemic oxygenation. Presumably this improvement relates to the normal involution of fetal medial smooth muscle in pulmonary arterioles that occurs rapidly during this period.

Complications of prostaglandin E_1 •Prior to release of Prostin VR®, nearly 500 infants in several centers were studied in clinical trials.[39] Side effects (Table 3) of moderate fever (38°-39°), apnea, hypotension, bradycardia, regional vasodilation (rash), tremors, and/or focal seizures occurred. As noted in Table 3, hypotension, bradycardia and apnea were more frequent in preterm infants. Thus, when using PGE_1, the physician should be prepared to treat apnea with intubation and ventilation and hypotension with either plasma, pressors, or lowering of PGE_1 dose, particularly if the patient weighs less than 2 kg.

Diagnosis of the specific cardiac lesion is not essential prior to use of PGE. If the primary care physician is reasonably certain that a life-threatening congenital heart defect is present, there is little risk to beginning treatment with PGE. Only in the case of obstructed pulmonary venous return (such as total anomalous pulmonary venous return to the inferior vena cava) has it been suggested that PGE may be contraindicted,[40] and even this suggestion is not well documented. Thus, every facility in which babies are delivered should have PGE_1 continuously available for emergency use.

TABLE 3.—Side Effects of PGE_1 By Birth Weight (n = 492).

	< 2 kg	> 2 kg
Cardiovascular (hypotension, vasodilation, bradycardia)	37%	17%
Central Nervous System (fever, tremors, seizures)	16	16
Respiratory (apnea)	42	10
Metabolic	5	2
Infectious	11	2
Gastrointestinal (diarrhea)	11	3
Hematologic	5	2
Renal	0	2

References

1. Gentile, R., Stevenson, G., Dooley, T., Franklin, D., Kawabori, I., and Pearlman, A.: Pulsed Doppler Echocardiographic Determination of Time of Ductal Closure in Normal Newborn Infants, J. Pediatr. 98:443-448, 1981.
2. Jacob, J., Gluck, L., DiSessa, T., Edwards, D., Kulovich, M., Kurlinski, J., Merritt, T.A., and Friedman, W.F.: Contribution of PDA in Neonate with Severe RDS, J. Pediatr. 96: 79-87, 1980.
3. Gittenberger-deGroot, A., van Ertbruggen, I., Moulaert, A.J.M.G., and Harinck, E.: Ductus Arteriosus in Preterm Infant: Histologic and Clinical Observations, J. Pediatr. 96:88-93, 1980.
4. McMurphy, D.M., Heymann, M.A., Rudolph, A.M., and Melmon, K.L.: Developmental Changes in Constriction of Ductus Arteriosus: Responses to Oxygen and Vasoactive Substances in Isolated Ductus Arteriosus of Fetal Lamb, Pediatr. Res. 6:231-238, 1972.
5. Heymann, M.A. and Rudolph, A.M.: Control of Ductus Arteriosus, Physiol. Rev. 55: 62-78, 1975.
6. Edmunds, L.H., Gregory, G.A., Heymann, M.A., Kitterman, J.A., Rudolph, A.M., and Tooley, W.H.: Surgical Closure of Ductus Arteriosus in Premature Infants, Circulation 48:856-863, 1973.
7. Rudolph, A.M., Heymann, M.A., Fishman, N., and Lakier, J.B.: Formalin Infiltration of Ductus Arteriosus. Method for Palliation of Infants with Selected Congenital Cardiac Lesions, N. Engl. J. Med. 292:1263-1268, 1975.
8. Sharp, G.L.: Pharmacology of Prostaglandin Synthetase Inhibitors, in the Ductus Arteriosus: Report of 75th Ross Conference of Pediatric Research, ed. by Heymann, M.A. and Rudolph, A.M., (Ross Laboratories, Columbus, OH), 1978, pp. 31-34.
9. Coceani, F. and Olley, P.M.: Response of Ductus Arteriosus to Prostaglandins, Can. J. Physiol. Pharmacol. 51:220-225, 1973.
10. Sharpe, G.L., Thalme, B., and Larsson, K.S.: Studies in Closure of Ductus Arteriosus. XI. Ductal Closure in utero by prostaglandin synthetase inhibitor, Prostaglandins 8:363-368, 1974.
11. Heymann, M.A., Rudolph, A.M., and Silverman, N.H.: Closure of Ductus Arteriosus in Premature Infants by Inhibition of Prostaglandin Synthesis, N. Engl. N. Med. 295: 530-533, 1976.
12. Friedman, W.E., Hirschklau, M.J., Printz, M.P., Pittick, P.T., and Kirkpatrick, S.E.: Pharmacologic Closure of Patent Ductus Arteriosus in Premature Infants, N. Engl. J. Med. 295:526-529, 1976.

13. Rudolph, A.M. and Heymann, M.A.: Medical Treatment of Ductus Arteriosus, Hosp. Pract. pp. 57-65 (Feb.) 1977.
14. Neal, W.A., Kyle, J.M., and Mullett, M.D.: Failure of Indomethacin Therapy to Induce Closure of Patent Ductus Arteriosus in Premature Infants with Respiratory Distress Syndrome, J. Pediatr. 91:621-623, 1977.
15. McCarthy, J.S.; Zies, L.G., and Gelband, H.L.: Age-Dependent Closure of Patent Ductus Arteriosus by Indomethacin, Pediatrics 62:706-715, 1978.
16. Clyman, R.I.; Mauray, I.; Rudolph, A.M., and Heymann, M.A.: Age-Dependent Sensitivity of Lamb Ductus Arteriosus to Indomethacin and Prostaglandins, J. Pediatr. 96:94-98, 1980.
17. Clyman, R.I.; Mauray, F.; Roman, C.; Rudolph, A.M., and Heymann, M.A.: Glucorticoids Alter Sensitivity of Lamb Ductus Arteriosus to Prostaglandin E2, J. Pediatr. 98:126-128, 1981.
18. Clyman, R.I.; Ballard, P.L.; Sniderman, S., Ballard, R.A.; Roth, R., Heymann, M.A., and Granberg, J.P.: Prenatal Administration of Betamethasone ofr Prevention of Patent Ductus Arteriosus, J. Pediatr. 98:123-125, 1981.
19. Coceani, F.; Olley, P.M., and Bodach, E.: Lamb Ductus Arteriosus: Response to Prostaglandin E2, Prostaglandins 9:299-308, 1975.
20. Sharpe, G.L. and Larsson, K.S.: Studies on Closure of Ductus Arteriosus, X. In Vivo Effect of Prostaglandin, Prostaglandins 9:703-719, 1975.
21. Elliott, R.B.; Starling, M.B., and Neutze, J.M.: Medical Manipulation of Ductus Arteriosus, Lancet 1:140-142, 1975.
22. Olley, P.M.; Coceani, F., and Bodach, E.: E-Type Prostaglandins: New Emergency Therapy for Certain Cyanotic Congenital Heart Malformations, Circulation 53:728-731, 1976.
23. Neutze, J.M.; Starling, M.B., Elliot, R.B., and Barratt-Boyes, B.G.: Palliation of Cyanotic Congenital Heart Disease in Infancy with E-Type Prostaglandins, Circulation 55:238-241, 1977.
24. Heymann, M.A. and Rudolph, A.M.: Ductus Arteriosus Dilatation by Prostaglandin E1 in Infants with Pulmonary Atresia, Pedatrics 60:325-329, 1977.
25. Lewis, A.B.; Takahashi, M., and Lurie, P.R.: Administration of Prostaglandin E1 in Neonates with Critical Congenital Cardiac Defects, J. Pediatr. 93:481-485, 1978.
26. Heymann, M.A.; Berman, W.; Rudolph, A.M., and Whitman, V.: Dilatation of Ductus Arteriosus by Prostaglandin E1 in Aortic Arch Abnormalities, Circulation 59:169-173, 1979.
27. Benson, L.N.; Olley, P.M.; Patel, R.G.; Cocceani, F., and Rowe, R.D.: Role of Prostaglandin E1 Infusion in Management of Transposition of Great Arteries, Am. J. Cardiol 44:691-696, 1979.
28. Gerhardt, T. and Bancalari, E.: Lung Compliance in Newborns with Patent Ductus Arteriosus Before and After Surgical Ligation, Biol. Neonate 38:96-105, 1980.
29. Spach, M.S.; Serwer, G.A.; Anderson, P.A.W., Canent, R.V.,a nd Levin, A.R.: Pulsatile Aortopulmonary Pressure-Flow Dynamics of Patent Ductus Arteriosus in Patients with Various Hemodynamic States, Circulation 61:110-122, 1980.
30. Kitterman, J.A.: Effects of Intestinal Ischemia, in Necrotizing Enterocolitis in Newborn Infant: Report of Sixty-Eighth Ross Conference on Pediatric Research, ed. by Moore, T.D., (Ross Laboratories, Columbus, OH) 1975, pp. 38-40.
31. Perlman, J.M., Hill, A., and Volpe, J.J.: Effect of Patent Ductus Arteriosus on Flow Velocity in Anterior Cerebral Arteries: Ductal Steal in Premature Newborn Infant, J. Pediatr. 99:767-771, 1981.
32. Cotton, R.B., Stahlman, M.T., Bender, H.W.; Graham, T.P., Catterton, W.Z., and Kovar, I. Randomized Trial of Early Closure of Symptomatic Patent Ductus Arteriosus in Small Preterm Infants, J. Pediatr. 93:647-651, 1978.
33. Ellison, R.C., Peckham, G.J., Lang, P.; Talner, J.S., Lerer, T.J.; Lin, L., Dooley, K.J., and Nadas, A.S.: Evaluation of Preterm Infant for Patent Ductus Arteriosus, Pediatrics 71:364-372, 1983.
34. Serwer, G.A., Armstrong, B.E., and Anderson, P.A.W.: Continuous Wave of Doppler Ultrasonographic Quantitation of Patent Ductus Arterious Flow, J. Pediatr. 100:297-299, 1982.
35. Mahony, L.; Carnero, V.; Brett, C.; Heymann, M.A., and Clyman, R.I.: Prophylactic Indomethacin Therapy for Patent Ductus Arteriosus in Very-Low-Birth-Weight Infants, N. Engl. J. Med. 306:506-510, 1982.
36. Merritt, T.A., White, C.L., Jacoh, J., Kurlinski, J.; Martin, L., DiSessa, T.G.; Edwards, D., Friedman, W.F., and Gluck, L.: Patent Ductus Arteriosus Treated with Ligation or Indomethacin: Follow-up Study, J. Pediatr. 95:588-594, 1979.
37. Mikhail, M., Lee, W., Toews, W.; Svnhorst, D.P., Hawes, C.R., Hernandez, J., Lockhart, C., Whitfield, J., and Pappas, G.: Surgical and Medical Experience with 734 Premature Infants with Patent Ductus Arteriosus, J. Thorac. Cardiovasc. Surg. 83:349-357, 1982.
38. Tripp, M.E., Drummond, W.H., Heymann, M.A., and Rudolph, A.M.: Hemodynamic Effects of Pulmonary Arterial Infusion of Vasodilators in Newborn Lambs, Pediatr. Res. 14:1311-1315, 1980.
39. Lewis, A.B., Freed, M.A., Heymann, M.A., Roehl, S.L., and Kensey, R.C.: Side Effects of Therapy with Prostaglandin E1 in Infants with Critical Congenital Heart Disease, Circulation 64:893-898, 1981.
40. Freedom, R.M., Olley, P.M., Coceani, F., and Rowe, R.D.: Prostaglandin Challenge Test to Unmask Obstructed Total Anomalous Pulmonary Venous Correction in Asplenia Syndrome, Br. Heart. J. 40:91-94, 1978.

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Persistent fetal circulation

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Abstract: The pathophysiology and treatment of persistent fetal circulation are reviewed. Two neonates with this disorder are described. The clinical outcome is variable and depends on the primary illness.

In the late 1960's attention was focused on infants who had survived intrauterine hypoxia but manifested severe cyanosis and respiratory distress.[1] The normal transition from fetal to neonatal circulation was affected. Various terms have been used to describe this disorder including persistent pulmonary hypertension,[2] persistent transitional circulation[3] and persistent pulmonary vascular obstruction.[4] Persistent fetal circulation (PFC), however, is the most widely accepted.[5] We report two cases that demonstrate features of this syndrome.

Report of cases ● **Case 1** — A 24-hour-old, 4.3 kg white male infant was transferred to Miami Children's Hospital with a diagnosis of meconium aspiration, bilateral pneumothoraces and seizures. Poor progress in labor and fetal distress necessitated a cesarean section delivery. Resuscitation of the infant was difficult due to thick meconium in the trachea. Direct tracheal aspiration was performed. Respiratory distress increased and the infant was placed on 6 cm H_20 of continuous positive airway pressure and 100% 0_2. Chest radiograph revealed bilateral infiltrates. Arterial blood gas showed a pH 7.18, PCO_2 54 torr, $P0_2$ 31 torr. Subsequently he required assisted ventilation with pancuronium muscle relaxation. Bilateral pneumothoraces were evacuated with thoracostomy tubes attached to suction. Right brachial arterial $P0_2$ was 104 torr and the arterial $P0_2$ 40 torr in a sample drawn from an umbilical catheter with its tip in the descending aorta. Seizure activity was controlled with phenobarbital. The ventilator rate and peak pressure were adjusted to obtain a $PaC0_2$ in the 20-25 torr range. A response to a tolazoline bolus was achieved with the arterial $P0_2$ increasing 60 torr, but there was no response to a continuous infusion. Over the next five days there was gradual improvement in oxygenation with extubation on the sixth day of life and removal of chest tubes two days later. EEG demonstrated a paroxysmal discharge from a focus in the right temporocentral area and an abnormal sleep pattern. Brain-stem

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auditory evoked responses were normal. At the time of discharge, there was lower limb hypertonia. At follow-up at two years of age, there was evidence of severe developmental delay and mild spasticity.

Case 2 — A white female infant was delivered after a 42-week pregnancy with a birthweight of 3.8 kg. The Apgars were 8 at 1 minute and 9 at 5 minutes. Grunting and retractions developed immediately. Chest radiograph showed a left-sided diaphragmatic hernia. The baby was transferred to the Miami Children's Hospital for surgery. Initial arterial blood gas showed a $Pa0_2$ of 57 torr in 75% 0_2. Through an abdominal approach, the hernia was reduced. Postoperatively the infant was mechanically ventilated under a muscle relaxant, d-tubocurarine. Paired arterial blood gases in 50% 0_2 demonstrated a right-to-left shunt through the ductus arteriosus. The temporal arterial $P0_2$ was 195 torr and the umbilical arterial (descending aorta) $P0_2$ was 71 torr. Gradual improvement in ventilation occurred with extubation on the seventh day of life. Chest radiograph showed herniation of the right lung across the midline, related to hypoplasia of the left lung. The patient's growth and development was normal at five years of age.

Discussion • Normally, ventilation of the lungs is associated with a fall in pulmonary vascular resistance and a marked increase in pulmonary blood flow (Fig. 1). Left atrial pressure increases. The umbilical blood flow is interrupted and the right atrial pressure declines with the reduction in inferior vena caval blood flow. Left atrial pressure is greater than right atrial pressure with functional closure of the foramen ovale and cessation of the right-to-left shunt.[6]

With hypoxemia and acidosis vasoconstriction occurs in the pulmonary vasculature. Right heart and pulmonary artery pressure increases with a simultaneous reduction of pulmonary venous return to the left heart, causing persistent right-to-left shunting via the ductus arteriosus and/or foramen ovale.[5] This shunt of venoarterial blood causes arterial hypoxemia and further pulmonary vasoconstriction in a vicious cycle of events. The clinical features in PFC are quite variable. The neonates are

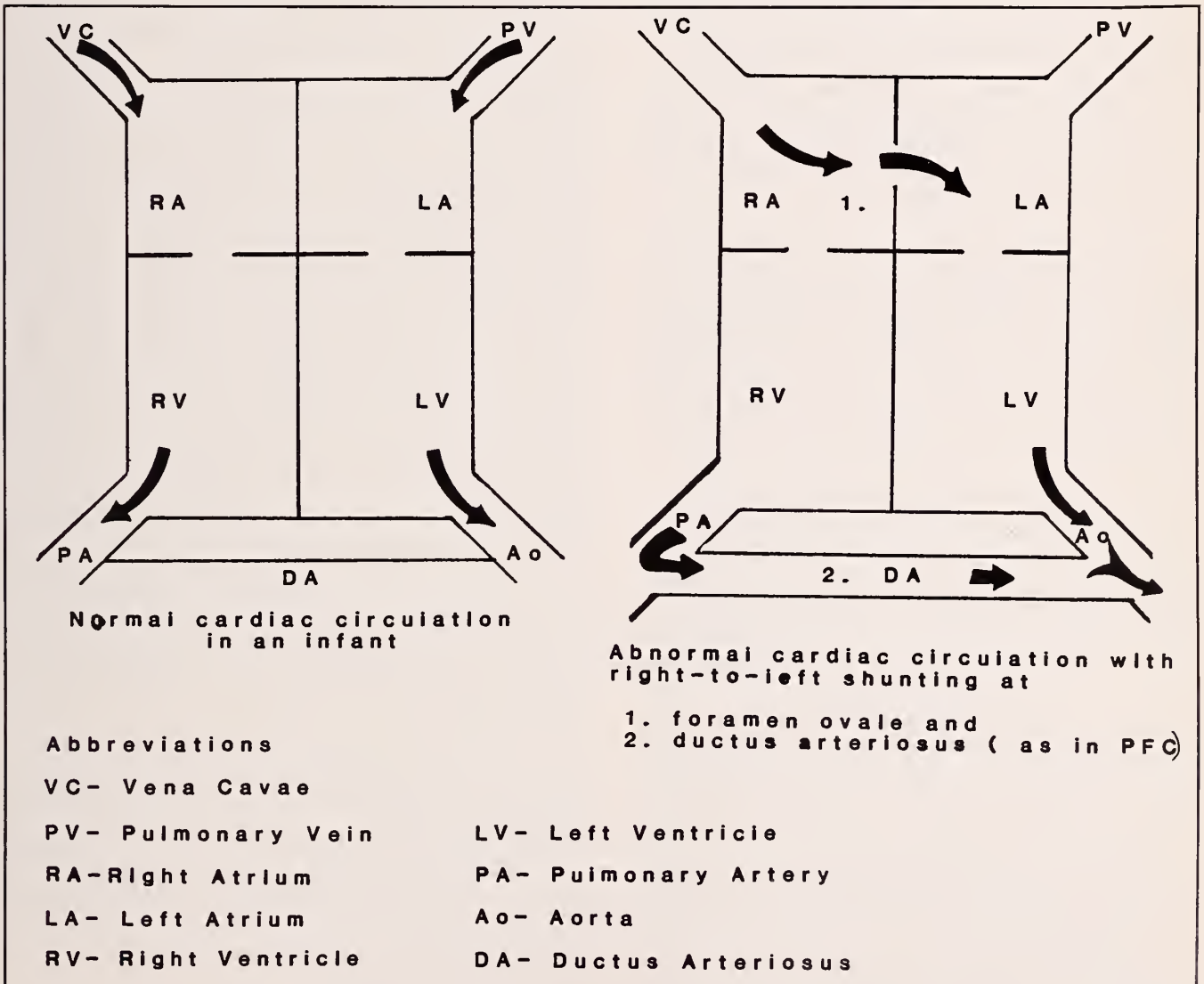


Fig. 1. — The normal neonatal cardiac circulation and reversal to the fetal circulation.

often near term, term or postterm and present with hypoxia and respiratory distress in the first 12 hours of life. The distress and hypoxia worsen with crying or agitation. An abnormally prominent right ventricular impulse and a loud second heart sound may be present and suggest pulmonary hypertension. A nonspecific short systolic murmur may be audible. The $Pa0_2$ may be less than 40 torr despite 100% 0_2 administration. An important diagnosis to exclude is cyanotic congenital heart disease. PFC may be confirmed if a ductal shunt is demonstrated with paired blood gases. A right radial or temporal PO_2 value 15 torr higher than a simultaneous umbilical arterial sample is highly suggestive of PFC with right-to-left shunting through the ductus arteriosus. A similar test can be carried out using transcutaneous $P0_2$ measurements at the right shoulder and abdomen. A negative test does not rule out PFC since there may be a right-to-left shunt at the level of the foramen ovale. Infants with cyanotic congenital heart disease and intracardiac shunting should have a difference of <5 torr between preductal and postductal $Pa0_2$.[7] With an electrocardiogram, the neonate with PFC shows right ventricular hypertrophy that may be considered within normal limits for age. When ST or T wave changes are present, suggesting subendocardial ischemia, myocardial dysfunction should be suspected.

Echocardiography may render unnecessary the use of invasive diagnostic studies to separate PFC from congenital heart disease.[8] The systolic time interval is defined as the ratio of the preejection period to the ventricular ejection time. Increased pulmonary vascular resistance or afterload such as seen in PFC increases the right ventricular systolic time interval.

It is apparent there is a spectrum of disturbances of the transitional circulation.[9] At one end of the spectrum is a "pure" form of PFC with pulmonary hypertension, a clear or almost clear radiograph, and normal cardiac examination; at the other end is PFC with myocardial dysfunction — a constellation of signs including a mild elevation in pulmonary artery pressure, cardiac failure, hypotension, gallop rhythm, and a systolic murmur at lower left sternal border or apex (possible tricuspid or mitral insufficiency).[10] Elevated myocardial-bound fraction of creatine phosphokinase enzyme (CPK) is associated with myocardial ischemia and necrosis involving the myocardial subendocardium and papillary muscles.[11] This cardiopulmonary disorder is also referred to as the asphyxiated heart syndrome.[12] In infants with PFC who have died despite intensive medical care, the pulmonary arteries have been shown to be abnormally muscular, with the medial wall thickness twice normal in all intra-acinar arteries,[13] which are distal to the terminal bronchioles. As a result, severe encroachment on the arterial lumen occurs and the cross-section area of the vascular bed is reduced. In these infants the underlying process appeared to be initiated in utero and not solely a result of postnatal events. Similar findings have been reported in neonates who developed PFC following prenatal exposure to prostaglandin synthetase inhibitors such as indomethacin and aspirin.[14] Autopsies of 23 infants with PFC revealed diffuse pulmonary microthrombi in eight.[15] It was postulated that these findings could have been related to amniotic fluid inhalation with or without meconium which caused local aggregation of platelets in the lung. Once platelets aggregate, vasoactive substances are released including thromboxane A_2 (TXA_2) and prostaglandin $F_2\alpha$ ($PGF_2\alpha$), both pulmonary vasoconstrictors. Pulmonary hypertension may have been caused by the effect of $PGF_2\alpha$ and TXA_2 and the decreased cross-sectional area of the vascular bed by platelets plugging vessels.

Numerous prenatal and neonatal disorders have been implicated in causing a reversal to the fetal circulation following delivery.[16] The first case report illustrates the association between perinatal asphyxia, pulmonary parenchymal diseases and pulmonary hypertension. Many respiratory disorders can cause PFC, including aspiration of amniotic fluid with or without meconium,[17] severe respiratory distress syndrome,[18] extensive pneumonia,[19] and wet lung syndrome.[20] The second case report is an example of the structural disorders of lung and pulmonary vessels that are associated with PFC. Infants with congenital diaphragmatic hernia[21] and ipsilateral pulmonary hypoplasia frequently develop severe pulmonary hypertension. Often there is an improvement in oxygenation postoperatively for a few hours but then profound arterial hypoxemia may occur which is unresponsive to mechanical ventilation. In addition, there are other disorders associated with PFC: hyperviscosity secondary to neonatal polycythemia[2] which elevates pulmonary artery pressure with subsequent right-to-left shunting across the ductus arteriosus and foramen ovale, and the metabolic derangements of hypocalcemia and hypoglycemia.[2]

Treatment of the infant with PFC begins with a review of the perinatal history, physical examination and chest radiograph. Laboratory values to be obtained include hematocrit, platelets, serum glucose, calcium and arterial blood gases. Blood cultures are obtained and antibiotics administered because of the possibility of sepsis/pneumonia. Correction of hypoxia and hypercapnia by mechanical ventilation and oxygen are important in stabilization. Subsequent management is complex and often includes respiratory paralytic drugs, hyperventilation, buffers and vasodilators. Combined therapy

may last four days to two weeks in severe PFC.[22] Infants with PFC have a very labile pulmonary vasculature which is sensitive to small changes in the arterial and alveolar $P0_2$. This is described as the "flip-flop" phenomenon[7] in which large decreases in $Pa0_2$ may occur in association with a decrease in inspired oxygen of more than 2%, touching, suctioning or chest physical therapy. Because of this instability and the adverse effects on oxygenation of "fighting the ventilator," infants with PFC frequently receive muscle relaxants (pancuronium, d-tubocurarine). If there is any base deficit, sodium bicarbonate is given intravenously. The $P0_2$ is usually maintained in a slightly hyperoxic range. If it becomes difficult to achieve satisfactory oxygenation, a trial of hyperventilation is begun.[22] The ventilator rate or peak inspiratory pressure is adjusted to achieve a $PC0_2$ between 20 and 25 torr. The respiratory alkalosis can effect a decrease in pulmonary artery pressure and a rise in $P0_2$. Clinical response can be recognized immediately when transcutaneous $P0_2$ increases. If there is failure to improve oxygenation, lowering the PCO_2 to 15-20 torr (pH 7.55-7.7) may be beneficial. This level of hypocapnia may adversely affect cerebral blood flow and therefore is only justified in infants who cannot be oxygenated by other means.

The use of vasodilators, particularly tolazoline HCl (an alpha-adrenergic blocking and histamine-releasing agent), has met with mixed success.[18] The object is to induce pulmonary vasodilation. Tolazoline is usually given into a scalp vein or right arm for the greatest concentration of drug to reach the pulmonary vasculature. Side effects are numerous including gastrointestinal hemorrhage and hypotension. Volume expansion may be required. Dopamine is often used during tolazoline therapy to maintain systemic blood pressure. A trial of tolazoline is employed if the patient has a critically low $P0_2$ despite hyperventilation to a $PC0_2$ of 15-20 torr. Prostaglandin I_2 (prostacyclin)[23] and prostaglandin D_2[24] are other pulmonary vasodilators under study.

The survival of neonates with PFC depends on the primary disorder. Of 54 infants who were hyperventilated, 56% survived.[7] In the four-year period 1979 to 1982, 23 patients with PFC were treated at Miami Children's Hospital with a survival rate of 78%. The nonsurvivors included three infants with congenital diaphragmatic hernia, the other infants having primary diagnoses of group B streptococcal sepsis and perinatal asphyxia. Overall, 70-80% of survivors are normal,[25] a relatively good outcome considering the severity of illness.

References

1. Gersony, W.M.; Duc, G.V., and Sinclair, J.C.: PFC Syndrome (Persistence of Fetal Circulation), Circulation (suppl. III) 40:111-187, 1969.
2. Levin, D.L.; Heymann, M.A., and Gregory, G.A., et al: Persistent Pulmonary Hypertension of Newborn, J. Pediatr 89:626-630, 1978.
3. Brown, R., and Pickering, K.. Persistent Transitional Circulation, Arch. Dis. Child. 49:883-885, 1974.
4. Siassi, B.; Goldberg, S.J., and Emmanouilides, G.C., et al: Persistent Pulmonary Vascular Obstruction in Newborn Infants, J. Pediatr. 78:610-615, 1971.
5. Behrman, R.E.: Persistence of Fetal Circulation, J. Pediat 89:636-637, 1976.
6. Rudolph, A.M.: Physiologic Events Occurring During the Transitional Circulation, in Peckham, G.J., and Heymann, M.A., (eds.) Cardiovascular Sequelae of Asphyxia in Newborn. Report of Eighty-Third Ross Conference on Pediatric Research. Columbus, Ohio, Ross Laboratories, 1982, p. 30.
7. Fox, W.W.: Arterial Blood Gas Evaluation and Mechanical Ventilation in Management of Persistent Pulmonary Hypertension of Neonate, in Peckham, G.J., and Heymann, M.A. (eds.): Cardiovascular Sequelae of Asphyxia in Newborn, Report of Eighty-Third Conference on Pediatric Research. Columbus, Ohio: Ross Laboratories, 1982, p. 102-109.
8. Riggs, T.; Hirschfeld, S., and Fanaroff, A., et al: Persistence of Fetal Circulation Syndrome, Echocardiographic Study, J. Pediatr. 91:626-631, 1977.
9. Reimenschneider, T.A.; Neilson, H.C., and Rattenberg, H.D., et al: Disturbances of Transitional Circulation, Spectrum of Pulmonary Hypertension and Myocardial Dysfunction, J. Pediatr. 89:622-625, 1976.
10. Bucciarelli, R.L.; Nelson, R.M., and Egan, E.A., et al: Trnasient Tricuspid Insufficiency of Newborn, Form of Myocardial Dysfunction in Stressed Newborn, Pediatrics 59:330-337, 1977.
11. Nelson, R.M.; Bucciarelli, R.L., and Eitzman, D.W., et al: Serum Creatinine Phosphokinase-MB Fraction in Newborns with Transient Tricuspid Insufficiency, N. Engl. J. Med. 298:146-149, 1978.
12. Burnard, E.D., and James, L.S.: Failure of Heart after Undue Asphyxia at Birth, Pediatrics 28:545-565, 1961
13. Murphy, J.D.; Rabinovitch, M.; Goldstein, J.D., and Reid, L.M.: Structural Basis of Persistent Pulmonary Hypertension of Newborn Infant, J. Pediatr. 98:962-967, 1981.
14. Levin, D L.; Fixler, D.E.; Morriss, F C., and Tyson, J.: Morphologic Analysis of Pulmonary Vascular Bed in Infants Exposed in utero to Prostaglandin Synthetase Inhibitors, J. Pediatr. 92:478-483, 1978.
15. Levin, D.L.; Weinbergf, A.G., and Perkin, R.M.: Pulmonary Microthrombi Syndrome in Newborn Infants with Unresponsive Pulmonary Hypertension, J. Pediatr. 102:(2)299-303, 1983.
16. Rowe, R.D.: Abnormal Pulmonary Vasoconstriction in Newborn, Pediatrics 59: 318-319, 1977.
17. Fox, W.W.; Gewitz, M.H., and Dinwiddie, R., et al: Pulmonary Hypertension in Perinatal Aspiration Syndromes, Pediatrics 59:205-211, 1977.
18. Goetzman, B.W.; Sunshine, P., and Johnson, J.D., et al: Neonatal Hypoxia and Pulmonary Vasospasm: Response to Tolazoline, J. Pediatr. 89:617-621, 1976.
19. Meadow, W.L. and Meus, P.J.. Animal Model of Neonatal Sepsis. Cardiovascular Sequelae of Type IB Beta Strep (GBS) Bacteremia in Newborn Piglet, Pediatr. Res. 14:606, 1980.
20. Bucciarelli, R.L.; Egan, E.A.; Gessner, I H., and Eitzman, D.V.: Persistence of Fetal Cardiopulmonary Circulation: One Manifestation of Trnasient Tachypnea of Newborn, Pediatrics 58:192-197, 1976.
21. Siassi, B.; Cabal, L.A., and Goldberg, R.N., et al: Persistent Fetal Circulation in Neonates with Diaphragmatic Hernia, Pediatr. Res. 12:568, 1978.
22. Peckham, G.J., and Fox, W.W.: Physiological Factors Affecting Pulmonary Artery Pressure in Infants with Persistent Pulmonary Artery Hypertension, J Pediatr. 93:(6)1005-1010, 1978
23. Lock, J.E.; Olley, P.M., and Coceani, F., et al: Use of Prostacyclin in Persistent Fetal Circulation, Lancet 1:1343, 1979.
24. Soifer, S.J.; Morin, F.C., and Heymann, M.A.: Prostaglandin D_2 Reverses Induced Pulmonary Hypertension in Newborn Lamb, J. Pediatr. 100:(3)458-463, 1982.
25. Bernbaum, J.; Russell, P., and Gewitz, M.H., et al: Neurodevelopmental and Cardiorespiratory Follow-up of Infants with Persistent Pulmonary Hypertension of Newborn, Pediatr. Res. 15:651, 1981

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The dilemma of SIDS

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ABSTRACT: Sudden infant death syndrome (SIDS) is a devastating event occurring primarily in children previously thought to be healthy. The incidence of SIDS is 2 per thousand and although epidemiologic investigations have discovered high risk populations, its occurrence cannot be predicted with any reasonable accuracy. Appropriate counseling of parents of victims is essential to their future welfare.

Children with an apneic event which appears serious to their caretaker may be designated as having "near miss" SIDS if no reason for the apnea is found. These children and siblings of patients are frequently placed on home monitoring devices in an effort to prevent a subsequent death. Home monitoring is usually continued until six months of age at which time the risk for subsequent SIDS is considered to be low.

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For the parent and physician, sudden infant death syndrome (SIDS) continues to be a frightening and perplexing problem. Despite extensive research over the past decade into its epidemiology, pathology, and physiology this disease remains unpredictable and largely unpreventable. Most children who die of SIDS have no recognized antemortem features which allow the prediction of their eventual death. Another, perhaps related, group of children are those who have clinical events which their caretakers interpret as prolonged apnea. If no etiology is discovered, these children have been said to have had "near miss" SIDS. In this review, these two groups of children will be dealt with separately as the problems for the physician are different. Whether children dying of SIDS have the same pathologic and physiologic problems as children with "near miss" SIDS is till unsettled.

SIDS has been recognized for thousands of years. One of the first references occurs in I Kings 3:19, "And this woman's son died in the night, because she lay on it." Prior to the industrial revolution "over lying" was almost considered socially acceptable, possibly because infant mortality was so high and infanticide so common.[1] In the mid-19th century SIDS was ascribed to an enlarged thymus or "status thymicolymphaticus".[1] Irradiation of the thymus was accepted as the curative therapy for over 40 years. Prophylactic thymic radiation for all newborn infants was briefly fashionable.[2] In the late 19th century "over lying" or suffocation was again considered the major cause of SIDS and parents were held responsible for their children's death.[3] Even today many parents feel an implication of child neglect or abuse when their children are victims of SIDS.[4] From 1940 to 1950 carefully performed

autopsies delineated the major differences between violent death by suffocation and SIDS. In 1972 the first congressional investigation of SIDS was instituted, and in 1974 the Sudden Infant Death Syndrome Act was passed creating programs for counseling families of SIDS infants and providing for the dissemination of educational materials. As a result of this act, the Florida Sudden Infant Death Syndrome Program was instituted. This is now administered by the Department of Health and Rehabilitative Serves (HRS) through the Children's Medical Services (CMS) program office.

Epidemiologic investigations in the United States have indicated an incidence of SIDS in the range of 2-3 per thousand live births.[5] Across the United States there are 8,000 to 10,000 cases per year, making it one of the most frequent causes of death during the first year of life.[1] In Florida there were 193 cases in 1983. Public awareness of SIDS has resulted in anxiety among parents who have had previous children dying with SIDS or who have children whom they feel are at risk.

Uncertainty of causes • The incidence of SIDS varies dramatically with the patient's socioeconomic status with an increased risk in the lower socioeconomic groups.[6] Incidence peaks at 2-3 months; the condition is rare in the first few days of life or after a year.[1] The risk for a subsequent sibling of a SIDS victim is 21 per thousand if the affected child was a singleton birth[7] and rises to 42 per thousand for a twin.[7] The risk is the same for fraternal and identical twins.[8] Table 1 lists other risk factors. Physical examinations of children who subsequently have SIDS have demonstrated decreased tone, increased lethargy, abnormal cry, and weak suck.[17] There is also a higher rate of hospitalization,[17] pneumonia,[17] and a more frequent finding of thrush.

Pathologic studies of children dying of SIDS have shown minor upper respiratory tract infections in 40-75%[1] but usually normal interferon levels and no evidence of immunocompromise.[2] Infection with respiratory syncytial virus (RSV) has been associated with the development of apnea[18] but in only six of 51 patients with SIDS was a positive fluorescent antibody to RSV seen.[19] Infant botulism was reported in nine of 212 SIDS victims in California.[20] Normal levels of BUN, glucose, electrolytes, calcium, magnesium, copper, zinc, and normal vitamin levels have been found. Infants have been reported to have vocal cord ulceration[4] edema of the lungs,[1] and petachiae in the lungs, heart and thymus,[1] but these findings are now believed nonspecific terminal events.[21] Although there is some preliminary evidence of chronic hypoxemia on the basis of neurologic and other tissue findings,[22] the significance of these findings has not been settled. A recent finding of retardation of brain stem synapse formation in infants dying of SIDS may explain the postulated abnormal respiratory control and failure of arousal mechanisms.[23] These preliminary observations await confirmation by other investigators.

Physiologic studies have led to conflicting views regarding the importance of airway obstruction in patients dying of SIDS. Although they usually do not have a history of noisy respiration, a complete airway obstruction in association with failure of arousal in an infant during sleep could easily be fatal. Attention has been paid to the relationship between abnormalities in the regulation of breathing and the development of SIDS.[24] Unfortunately, few physiologic studies of infants who subsequently die of SIDS have been performed. Most studies have relied on parents or siblings of victims or on patients with "near miss" SIDS. These subjects may not be appropriate for the study of the control of breathing as it relates to patients. The only consistent findings have been an increased respiratory rate and amount of periodic breathing both in siblings of victims and in patients with "near miss" SIDS.[25]

There are currently no certain means of identifying infants at very high risks for SIDS and no proven means of preventing it. It is, however, possible to deal effectively with families who have lost an infant. Caretakers of these infants frequently feel a tremendous guilt which may be unknowingly increased by spouses, neighbors, emergency personnel, physicians, police and the press. Unless adequate and effective counseling is given early, guilt and blame may persist for many years. Effective counseling primarily depends on knowledge of SIDS and compassion for the family. The following points are also of importance:

1. An autopsy should be available for all infants, not just for those families who can afford them, and must be interpreted appropriately by pathologists who feel comfortable in diagnosing children as having died of SIDS.

Table 1.—Factors Increasing the Incidence of SIDS.

Low socioeconomic class [6]	Previous sibling dying of SIDS [7]
Twin dying of SIDS [8]	Young mother [7]
Mother multiparous [6]	Illegitimacy [6]
Poor maternal prenatal care [6]	Premature birth [6]
Short interpregnancy interval [9 10]	Maternal smoking [11]
Maternal opiate addiction [12]	High altitude [13]
Rapid change barometric pressure [14]	DPT immunization [15]
Air pollution [16]	

2. When the autopsy reveals no cause of death, the parent should be told immediately that the child died of SIDS without waiting for weeks or months for microscopic and toxicologic studies.
3. Printed educational material is valuable for the parents to refer to following the death.
4. Follow-up contact by medical personnel may be very useful in helping parents to deal with the grieving process.

In Florida, nurses in the local county health department provide information and counseling to the parents and families. Further information regarding the Florida program can be obtained by contacting Shirley Penn at (904) 488-6005 or by writing her in care of the Department of Health and Rehabilitative Services, 1317 Winewood Blvd., Tallahassee 32301.

Near miss episodes • As obscure as the precise etiology of SIDS, is the relationship of SIDS to "near miss" SIDS. The term "near miss" was suggested in 1963 and originally used to identify infants with apnea and bradycardia who experienced episodes of nearly missed death and in whom the cause of the apnea was not apparent.[26] Although it seems clear that infants who have suffered a "near miss" event have an increased risk for subsequent SIDS,[27] it is not clear that SIDS and "near miss" SIDS represent the same pathological process.

Any infant who presents with a history of a "near miss" SIDS should be hospitalized for evaluation. A thorough history should include time of the episode, whether the child was asleep or awake, time of the last feeding or feeding problems in the child, location of the episode (at home or elsewhere), whether there was a preceding respiratory infection, whether cyanosis or color change occurred, presence of a family history of SIDS, seizures or heart disease, type of resuscitation given, some assessment of the reliability of the history giver and the presence of other body movements suggesting a seizure. Laboratory evaluation should include electrolytes, complete blood count, chest roentgenogram, barium swallow, electroencephalogram, calcium, magnesium, electrocardiogram, and possibly a recording of heart rate and respiratory rate. One study evaluating 28 consecutive babies of less than six months presenting with apnea identified a probable cause of the apnea in 17.[28] These causes included gastroesophageal reflux in six, encephalitis in four, seizures in three, and periventricular edema, Arnold-Chiari malformation, milk allergy, and a normal amount of periodic breathing in one each. Although this may not be a representive cross sample of infants presenting with severe apnea, it does suggest the range of diagnoses which may be found.

Because of the possibility of subsequent death in patients with "near miss" SIDS and the hope that subsequent death might be prevented by early intervention, many patients have been placed on home monitors. These have caused much discussion.[29] The home monitor is not a cure for "near miss" SIDS, but requires in addition a class in cardiopulmonary resuscitation, sympathetic health care professionals with whom the parents can discuss their concerns, and home visits from a nurse or team worker to help the parents manage the problems which may arise during monitoring. Parents need to know how to manage and cope with false alarms what to do in case of power failure, and need to be able to record the number of alarms, time of occurrence, and the requirements for resuscitation. Home monitoring companies provide services at a substantial price.

The dilemma concerns who should be monitored and for how long. In an effort to resolve some of these questions, investigators have recorded multiple parameters including respiratory rate, electrocardiogram, nasal air flow by thermister, electroencephalogram, and transcutanous oxygen tension.[30] This multiple-parameter monitoring is known as polysomnography. In nonresearch centers, these studies usually involve only respiratory and cardiac rates and are called "pneumocardiograms". Usually prolonged studies are performed during sleep either in the hospital or at home.[31] Much physiologic data may be obtained but none is universally accepted as being predictive of subsequent SIDS.

Apnea, defined as cessation of air exchange,[32] is considered pathologic when it lasts for more than 20 seconds or is associated with bradycardia. Apnea may be central when there is simultaneous cessation of respiratory effort and air flow, or obstructive when there is cessation of air flow but continued respiratory effort. The definition of obstructive apnea requires the ability to monitor air flow. Mixed apnea is defined as cessation of respiratory air flow with respiratory effort present for part of the event and absent for the remainder. It, therefore, includes both central and obstructive apnea in the same event. Periodic breathing is a series of respiratory pauses of two to ten seconds duration interspersed with periods of breathing of four to 15 seconds and occurring at least three times per minute. Periodic breathing is not usually associated with color change or bradycardia. Apnea of greater than 20 seconds, apnea associated with bradycardia and periodic breathing for more than 4% of the total sleep time have been considered abnormal when present in recordings.[31] Their predictive value for

occurrence of SIDS, however, remains controversial. Although polysomnography in a research center may be useful in evaluation of a child with apnea, the commercially available pneumocardiogram is of questionable value in therapeutic decisions.

Most children will come to their physician's attention as a result of some clinical episode that has concerned the parents or as a result of a previous sibling having died of SIDS. We routinely monitor patients who present with a history of "near miss" SIDS requiring resuscitation in whom no etiology is discovered during an in-hospital evaluation. Some experts also recommend that all twins and subsequent siblings of SIDS victims be monitored. Others frequently monitored include premature infants still having apnea near the time of discharge, infants with bronchopulmonary dysplasia, and infants with tracheostomies. There can be no absolute and universal criterion for monitoring in such a controversial area. In each case the physician and parents must make the final decision.

Once instituted, monitoring usually will be continued until the infant reaches six months of age. At that time it may be discontinued if the patient has had no apnea recorded for a two month period despite an upper respiratory tract infection or a DPT immunization. The usefulness of the pneumocardiogram in discontinuation of home monitoring is even more questionable than in its institution. Many patients are monitored because of the severity of a "near miss" episode despite the fact that the pneumocardiogram was normal. In this instance with no recurrence of apnea for two months, a follow-up pneumocardiogram is certainly not required.

There is accumulating evidence that the SIDS infant is not totally normal prior to death. Although abnormalities in epidemiology and physiology have been demonstrated, no combination of findings can conclusively identify which infant may die of SIDS. The relationship of "near miss" infants to those dying of SIDS remains obscure. Home monitoring may allay the fears of parents and soothe the souls of physicians but has never been conclusively demonstrated to decrease the incidence of subsequent death. Management of these children and of their families continues to be a challenge to physicians and paramedical personnel.

References

1. Beckwith, J.B.: Sudden Infant Death Syndrome, Curr. Probl. Pediatr. 3:3, 1973.
2. Guntheroth, W.G.: Cribdeath: Sudden Infant Death Syndrome, New York, Futura Publishing Co., 1982.
3. Templeman, C.: Two Hundred and Fifty-Eight Cases of Suffocation in Infants, Edenhurgh Med. J. 38:3221, 1982.
4. Werne, J. and Garrow, I.: Sudden Apparently Unexplained Death During Infancy 1. Pathological Findings in Infants Found Dead, Am. J. Pathol. 29:633, 1953.
5. Shannon, D.C.: Sudden Infant Death Syndrome, Clin. Chest Med. 1(3):327, 1980.
6. Petersen, D.R.; van Belle, G. and Chinn, N.M.: Epidemiologic Comparisons of Sudden Infant Death Syndrome with Other Major Components of Infant Mortality, Am. J. Epidemiol. 110:699, 1979.
7. Petersen, D.R.; Chinn, N.M., and Fisher, L.D.: Sudden Infant Death Syndrome. Repetitious in Families, J. Pediatr. 97:265, 1980.
8. Spiers, P.S.: Estimated Rates on Concordancy for Sudden Infant Death Syndrome in Twins, Am. J. Epidemiol. 100:1, 1974.
9. Froggatt, P.; Lynas, M.A., and MacKenzie, G.: Epidemiology of Sudden Unexpected Death in Infants ("Cot Death") in Northern Ireland, Br. Birth J. Prev. Soc. Med. 25:119, 1971.
10. Bergman, A.B.; Ray, C.G., and Pomeroy, M.A. et al: Sutdies of Sudden Infant Death Syndrome in King County, Washington III. Epidemiology, Pediatrics 49:860, 1972.
11. Chavez, C.J.; Ostrea, E.M., and Stryker, J.C. et al: Sudden Infant Death Syndrome Among Infants of Drug-Dependent Mothers, J. Pediatr. 95:407, 1979.
12. Finnegan, L.P.: In utero Opiate Dependence and Sudden Infant Death Syndrome, Clin. Perinatol. 6:163, 1979.
13. Getts, A.G., and Hill, H.F.: Sudden Infant Death Syndrome: Incidence at Various Altitudes, Dev. Med. Child Neurol. 24:61, 1982.
14. Heaney, S., and McIntyre, M.S.: Sudden Infant Death Syndrome and Barometric Pressure, J. Pediatr. 94:433, 1979.
15. Stewart, G.T.: Deaths of Infants After Triple Vaccine, Lancet 2:354, 1979.
16. Hoppenhrouwers, T.; Caluh, M., and Arakawa, K. et al: Seasonal Relationship of Sudden Infant Death Syndrome and Environmental Pollutants, Am. J. Epidemiol. 113.623, 1981.
17. Hillman, L.; Hoffman, H.J., and Jones, M. et al: Relationship of Prenatal and Neonatal Factors to SIDS: Preliminary Results of NICHD Cooperative Epidemiologic Study of Sudden Infant Death Syndrome (SIDS) Risk Factors, Pediatr. Res. 16:291A, 1982.
18. Bruher, F.W.; Mokrohisky, S.T., and McIntosh, K.: Apnea Associated with Respiratory Syncytial Virus Infection in Young Infants, J. Pediatr. 90:382, 1977.
19. Ferris, J.A.J.; Aherne, W.A., and Locke, W.S., et al: Sudden and Unexpected Death in Infants: Histology and Virology, Br. Med. J. 2:439, 1973.
20. Amon, S.S.; Medura, T.F., and Damusk, et al. Intestinal Infection and Toxin Production by Clostridium Botulinum as One Cause of Sudden Infant Death Syndrome, Lancet 1:1273, 1978.
21. Guntheroth, W.G.; Breazeale, D., and McGouch, G.A.: Significance of Pulmonary Peteciae in Crib Death, Pediatrics 52.201, 1973.
22. Naeye, R.L.: Sudden Infant Death, Sci. Am. 242:56, 1980.
23. Quattrochi, J.J.; Baba, N., and Liss, L., et al: Sudden Infant Death Syndrome (SIDS): Preliminary Study of Reticular Dendritic spines in infants with SIDS, Brain Res. 181:245, 1980.
24. Kelly, D.H., and Shannon, D.C.: Sudden Infant Death Syndrome and Near Sudden Infant Death Syndrome. Review of Literature, 1964 to 1982, Ped. Clin. N.A. 29:1241, 1982.
25. Kelly, D.H.; Walker, A.M., and Cahen, L., et al: Periodic Breathing in Siblings of Sudden Infant Death Syndrome Victims, Pediatrics 66:515, 1980.
26. Wedgewood, R.J., and Benditt, E.P. (eds): Sudden Death in Infants, Government Printing Office, 1965 P6-7.
27. Brooks, J.G.: Apnea of Infancy and Sudden Infant Death Syndrome, Am. J. Dis. Child. 136:1012, 1982.
28. Camfield, P.; Camfield, C.; Bugnell, P., and Rees, E.: Infant Apnea Syndrome. Prospective Evaluation of Etiologies, Clin. Pediatr. 21:684, 1982.
29. Bergman, A.B.; Beckwith, J.B., and Ray, C.G.: Apnea Monitor Business, Pediatrics 56:1, 1975.
30. Sternschneider, A.; Weinstein, S.L., and Diamond, E.: Sudden Infant Death Syndrome and Apnea/Obstruction During Neonatal Sleep and Feeding, Pediatrics 70:858, 1982.
31. Kelly, D.H. and Shannon, D.C.: Periodic Breathing in Infants with Near Miss Sudden Infant Death Syndrome, Pediatrics 63.355, 1979.
32. Guilleminault, C., and Korobkin, R.: Sudden Infant Death: Near Miss Events and Sleep Research, Some Recommendations to Improve Comparability of Results Among Investigators, Sleep 1:423, 1979.

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Bronchopulmonary Dysplasia

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ABSTRACT: Bronchopulmonary Dysplasia (BPD) describes chronic pulmonary changes that develop in neonates who require mechanical ventilation during the first days of life. More common in infants of lower gestational age, it occurs in about 15% of all infants who survive after mechanical ventilation due to hyaline membrane disease. The diangosis of BPD is based on the clinical and radiographic characteristics of these patients. Clinically they remain with variable degrees of respiratory failure requiring oxygen therapy for several weeks or months and usually they have CO_2 retention. Chest radiographs show areas of emphysema alternating with dense areas of collapse or fibrosis. In milder cases these changes are less striking and show diffuse densities in both lungs. Characteristics of pulmonary function are presented followed by a discussion of several factors which may contribute to the pathogenesis of this condition. Treatment of these infants should be directed to the elimination of factors which are described that predispose to the development of BPD. A favorable prognosis is presented as most infants survive and their pulmonary function shows progressive improvement with decreasing symptomatology.

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The term bronchopulmonary dysplasia (BPD) was introduced in 1967 by Northway, Rosan and Porter[1] to describe a series of chronic pulmonary changes that developed in a group of infants with Hyaline Membrane Disease (HMD) during mechanical ventilation with intermittent positive pressure (IPPV). Since then this problem has become one of the most common sequelae in newborns subjected to mechanical ventilation.

Incidence and clinical presentation • The incidence of BPD varies from 5%[2] to 68%,[3] partly due to differences in patient susceptibility and management but also to discrepancies in the definition of BPD and in the base population used in the calculation of incidence.

The incidence of BPD in infants with severe HMD who are ventilated with IPPV varies in most series between 10% and 20%.[4-6] With this incidence one can expect that approximately 1700 infants survive with this condition each year in this country. The number surviving with milder forms of chronic lung damage could be much higher. BPD is, therefore, a problem of great importance in terms of provision of medical care, resource allocation and family impact.

The diagnosis of BPD is based on the clinical and radiographic characteristics of these patients. The majority of infants who develop BPD are born prematurely, and almost all of them require prolonged mechanical ventilation with intermittent positive pressure because of respiratory distress syndrome. While the infants with BPD described by Northway had severe respiratory failure, more recently it has been recognized that many infants with BPD initially have only mild or moderage forms of pulmonary disease.[6,7] Patients with BPD usually require ventilation for many weeks or months and some die due to severe respiratory failure. Others show slow improvement in pulmonary function and only after long periods of time can be weaned from the ventilator. After extubation these infants remain with severe retractions and tachypnea and frequently have rales

and ronchi on auscultation. Their weight gain is usually below normal even when the amount of calories they receive is appropriate for their age. This may relate to a higher oxygen consumption due to increased work of breathing. When pulmonary failure persists for several months some infants develop signs of right heart failure with cardiomegaly, hepatomegaly and fluid retention secondary to pulmonary hypertension. Right ventricular failure was described as a frequent complication of BPD some years ago but is seen less commonly now.[6,8,9] This is probably related to improved care and to PaO_2 maintained at a higher level. Echocardiographic evaluation has shown normal pulmonary artery pressures as long as PaO_2 is maintained above 55 mmHg.[8,10]

Episodes of acute bacterial or viral pneumonia occur frequently in these infants and worsen their respiratory failure.

In summary, the clinical course of most patients with PBD is characterized by a premature infant who requires IPPV early in life due to acute respiratory failure usually secondary to HMD. Because of the severity of the initial disease or due to complications, they require extended ventilatory support and gradually develop chronic pulmonary changes and respiratory failure that may persist for several months or years.

The radiographic changes are one of the most important tools in diagnosis of BPD. The four stages of the disease described by Northway[1] were based primarily on the radiographic evolution. The first stage corresponded to typical hyaline membrane disease with diffuse granular densities and air bronchograms. In the second stage, the x-ray examination showed nearly complete opacificaiton of both lung fields. In stage III, the radiographs showed areas of radiolucency resembling bullae in both lungs alternating with irregular densities giving the lungs a spongy appearance. In the most advanced form of the disease, stage IV, the x-ray was characterized by large hyperlucent areas alternating with thinner strands of radiodensity, frequently accompanied by evidence of cardiomegaly. Many patients do not follow this course but still reach a final chronic stage similar to stage IV described by Northway.[11,13]

Since radiographic changes of the first three stages are nonspecific, the only changes required to make the diagnosis of BPD are those seen in the more advanced stages of the disease that persist for more than 3-4 weeks (Fig. 1).

Recently an increasing number of infants have been described who require prolonged respiratory support and whose clinical course is compatible with BPD but in whom the chest radiographs do not show the typical changes of stage IV. In these infants chest radiographs frequently show some hyperexpansion with fine diffuse bilateral lung densities but cardiomegaly is uncommon[13] (Fig. 2). It is likely that these patients have the same disease but of a lesser severity than those described originally.

In summary, the radiographic progression through the four classical stages of BPD is not always present so that absence of stages I and III does not rule out the diagnosis of BPD. This diagnosis is made in infants who develop chronic respiratory failure after mechanical ventilation with hypoxemia lasting more than 28 days. In addition, they have persistent radiographic changes characterized by hyperinflation and/or strands of increased density.

Pulmonary function • Patients with advanced BPD have severe respiratory failure with varying degrees of hypoxemia and hypercapnia. Minute volume is usually normal but this is accomplished with a smaller tidal volume and a higher respiratory rate than normal.[14,15] The increase in dead space ventilation, partially explains the alveolar hypoventilation and CO_2 retention.

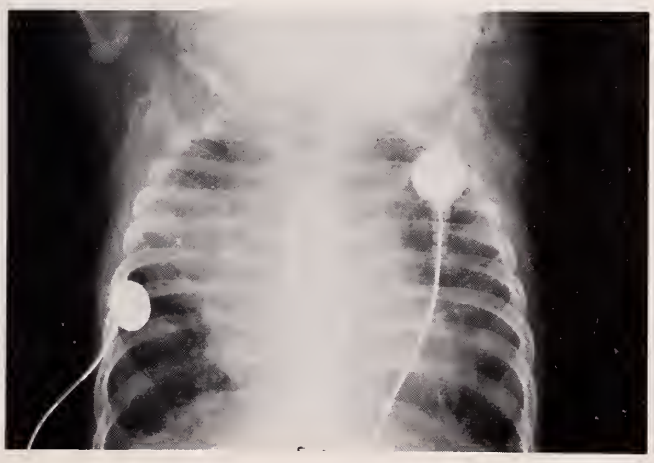


Fig. 1. — Chest x-ray shows hyperlucency of both bases with strands of higher radiodensity. Cardiac silhouette is enlarged.

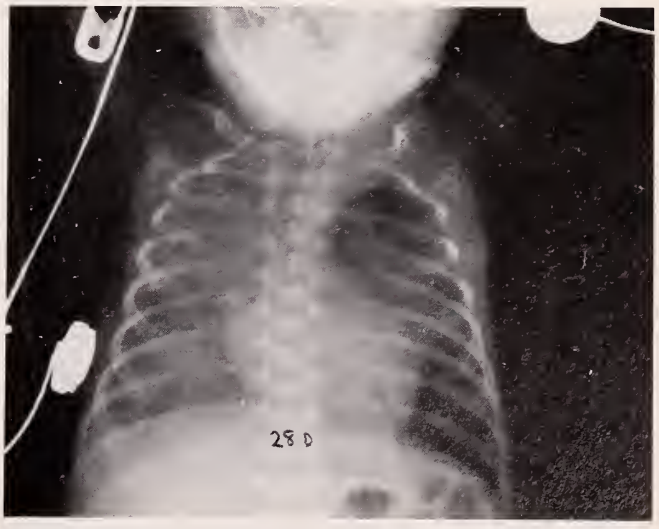


Fig. 2. — Diffuse densities in both lungs with some hyperlucency of left base.

Infants with BPD characteristically have a marked increase in airway resistance,[16,17] a decreased dynamic compliance and a large increase in the work of breathing. Static compliance is normal or increased[16] indicating that the decrease in dynamic compliance is mainly due to the increased airway resistance. (With airway obstruction dynamic compliance becomes frequency dependent and decreases at higher respiratory rates.) Functional residual capacity may be decreased, normal or increased, depending on the severity and stage of the pulmonary involvement.[18] The distribution of ventilation may also be abnormal in the more advanced stages reflecting the involvement of small airways.[14]

These changes in lung function result in hypoxemia and hypercapnia of varying degrees. Most infants require supplemental oxygen for a long time to maintain PaO_2 above 50 mmHg. The oxygen requirement decreases very gradually as the disease process improves but increases during feedings, physical activity or during episodes of pulmonary infection or edema.

The increased $PaCO_2$ is secondary to alveolar hypoventilation and to an increased alveolar-arterial CO_2 gradient.[14] In most of these patients the chronic hypercapnia results in an increased blood bicarbonate that tends to partially correct the respiratory acidosis. This increase in base can be exaggerated by the chronic use of diuretics.

Pathogenesis • The exact mechanisms that lead to the severe morphological and functional disruption of the lungs in patients with BPD have not been clearly established. Because the disease occurs almost exclusively in infants who require mechanical ventilation with positive pressure, this therapy has been considered one of the most likely causes.[21] Other factors may include oxygen toxicity, prematurity, lung damage produced by severe hyaline membrane disease and pulmonary edema due to a patent ductus arteriosus (PDA) or excessive fluid administration.

In infants with HMD, it is difficult to separate the effects of positive pressure from other factors that may influence the development of BPD. Most of these patients require aggressive respiratory support including high pressures and oxygen concentrations and frequently have complications such as PDA and pulmonary interstitial emphysema that may predispose to BPD. Although it is likely that positive pressure contributes in some degree to the damage of the small airways and to maldistribution of the inspired gas, there is not enough clinical or experimental evidence to single out one aspect of mechanical ventilation as the critical factor in the pathogenesis of BPD.

Clinically and experimentally, it is well established that a high inspired oxygen concentration can produce severe functional and morphologic changes in the lungs, many of which are similar to those observed in BPD.[19,20] Because of this, interest has been focused on the susceptibility of the newborn to the toxic effects of oxygen. Some evidence tends to support the concept that oxygen plays an important role in pathogenesis of BPD but some findings do not support its importance as a single factor. One is the very low incidence of BPD in infants who receive high oxygen concentrations for long periods of time but are not ventilated with positive pressure. Also, there is an increasing number of patients reported in the literature who develop BPD after receiving high oxygen concentrations for only short periods of time.[4,6,7] Exposure to high oxygen concentrations for extended periods of time seems to be one of the factors in the pathogenesis of BPD, but other concomitant influences seem to be required for the development of the chronic pulmonary changes characteristic of this disease. One of this is pulmonary edema due to a patent ductus arteriosus.

The vast majority of infants with BPD have evidence of a PDA at some point during their course[5,6] or at postmortem examination.[21] Brown et al[5] found that infants who developed BPD had received greater fluid intake in the first five days of life when compared with infants who did not develop BPD. These two findings suggest that an increased pulmonary blood flow and/or interstitial fluid in the lung may be another predisposing factor that increases the risk of BPD in preterm infants with HMD. Increased pulmonary blood flow and the resulting increase in

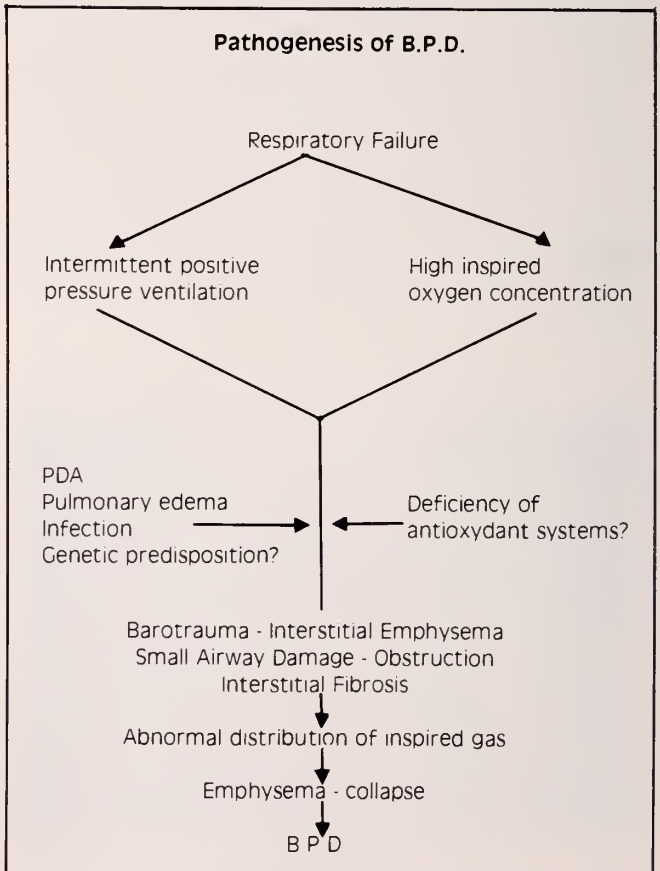


Fig. 3. — Factors that may influence the development of BPD.

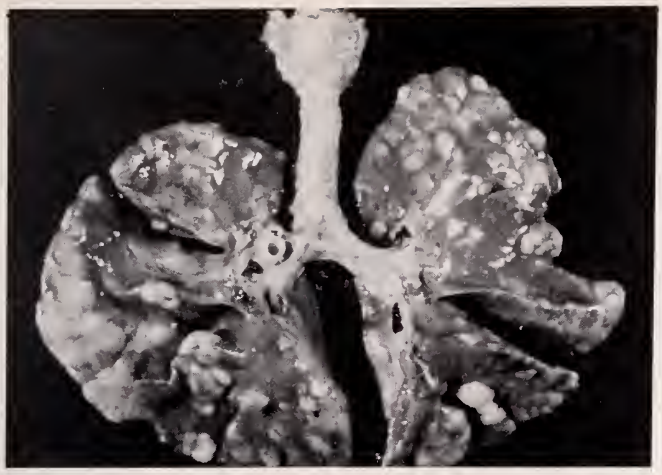


Fig. 4. — Microscopic appearance of lungs with BPD showing areas of collapse and over-expansion.

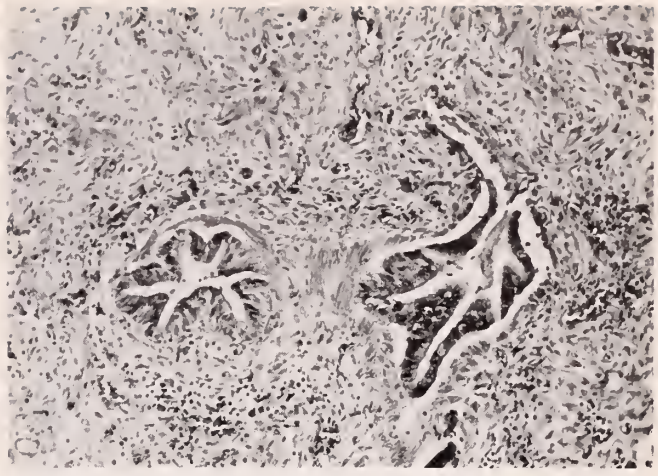


Fig. 6. — Small airway showing partial obstruction of their lumen by hyperplastic epithelium.

interstitial fluid cause a decrease in pulmonary compliance and increase in airway resistance,[22] making the use of higher ventilatory pressures and oxygen concentrations necessary. The increased resistance can alter different segments of the lung and impair distribution of the inspired gas favoring uneven lung expansion. Figure 3 shows the possible interaction of some of the factors that may be important in the pathogenesis of BPD.

Pathology • In the more chronic forms of the disease, the lungs have a grossly abnormal appearance; they are firm, heavy and darker than normal. The surface is irregular, many times showing overdistended emphysematous areas alternating with areas of collapse (Fig. 4).

On histological examination, the lungs are characterized by areas of emphysema, sometimes coalescent into larger cystic areas surrounded by areas of atelectasis (Fig. 5). There is widespread bronchial and bronchiolar mucosal hyperplasia and metaplasia that reduce the lumen in many of the small airways (Fig. 6). In some cases, there may be excessive mucus secretion with exudation of alveolar macrophages. Except for the hypertrophy of the peribronchiolar smooth muscle that persists throughout the course of the disease, involvement of the small airways is more prominent during the early stages, becoming less marked after the first month of evolution.[23] Interstitial edema and increase in fibrous tissue with focal thickening of the basal membrane separate capillaries from alveolar spaces (Fig. 7). Lymphatics are frequently dilated and tortuous. In some cases vascular changes of pulmonary hypertension, such as medial muscle hypertrophy and elastic degeneration, right ventricular hypertrophy, and left ventricular hypertrophy occur in patients dying with BPD.[8]

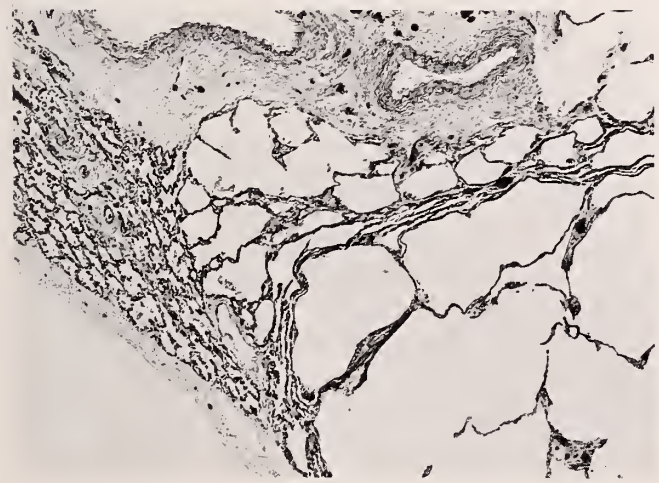


Fig. 5. — Microscopic view at low magnification of lung with BPD showing areas of emphysema alternating with areas of partial collapse.

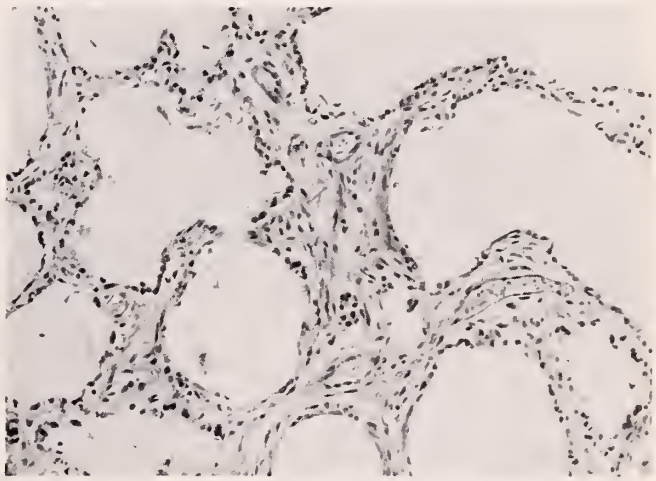


Fig. 7. — Alveolar septal thickened by fibroblastic proliferation and edema.

Prevention and treatment • BPD occurs as a consequence of the interaction of multiple factors but none has been clearly established as the most important. Therefore, the prevention of BPD must be attempted by minimizing all these factors, especially in small premature infants with HMD who are most susceptible to this condition. One must use the lowest peak airway pressure required to obtain adequate ventilation and this pressure must be lowered rapidly as the mechanical characteristics of the lungs improve. The end-expiratory pressure must be adjusted so that the minimum oxygen concentration necessary to keep the PaO_2 above 50 mmHg is used. Fluid administration must be carefully controlled and restricted, especially if there is evidence of a PDA. Diuretics and early intervention with drugs or surgery to close the ductus will improve lung function, reduce the exposure to prolonged IPPV and high oxygen concentrations,[24,26] and lessen lung edema in infants with cor pulmonale.[28,29]

Once the diagnosis of BPD is established, therapeutic efforts should be directed at maintaining adequate arterial blood gases and at the same time avoiding the progression of the pulmonary lesions.

Weaning these patients from the ventilator is difficult and must be accomplished gradually. In some cases aminophylline can be used as a respiratory stimulant during the weaning.[30] During the days following extubation, it is important to do chest physiotherapy and, if necessary, direct endotracheal suctioning to prevent lung collapse due to retained secretions.

It is important to maintain the PaO_2 at a level sufficient to assure adequate tissue oxygenation and avoid the pulmonary hypertension and cor pulmonale that can result as a consequence of chronic hypoxemia. During feedings oxygen consumption increases and the PaO_2 may decrease so it may be necessary to provide a higher FiO_2 to avoid hypoxemia. In many cases, oxygen therapy is required for several months or even years. Some of these patients can be sent home with oxygen therapy. This may offer significant advantages in terms of a better environment for the patient and financial savings for the family.[27]

Nutritional needs are difficult to meet in these patients because of poor feeding tolerance, the need to restrict fluids and the increased caloric need due to the excessive work of breathing. Thus, nasogastric feeding using concentrated diets for extended periods may be necessary.

A special emphasis on psychosensory stimulation is important to compensate for the lack of family influence and the abnormal environment in which these infants spend a large proportion of a critical period of their development.

Prognosis • The survival of infants with BPD has improved in recent years. While 70% of those described by Northway[1] died, in more recent series the mortality has been markedly reduced.[2,4,6] A significant proportion of infants die after discharge from the hospital,[4] usually due to acute respiratory infections. The average hospitalization may be longer than five months,[6] primarily because of the need for supplemental inspired oxygen, and may be reduced considerably if patients can be given oxygen at home.[27] Growth and development are delayed in most infants with BPD, partly due to the difficulties in providing adequate nutrition and partly to the lack of normal sensory stimulation since these infants spend extended periods of time in an oxygen tent.

Little is known regarding the long-term evolution of the pulmonary lesions in BPD. While most infants show progressive improvement of respiratory status, they frequently have episodes of deterioration with signs of airway obstruction and increasing hypoxemia that require readmission to the hospital. Radiographic changes also show improvement but in some cases they may persist for several years.[3,31] We are unaware of any long-term sequential study of pulmonary function in infants with BPD, because of the difficulty in performing these studies in children before five or six years of age. Evidence of airway obstruction with air trapping and bronchial hyperactivity was recently reported in ten survivors with BPD at seven to nine years of age.[32] This raises the possibility that infants with BPD may remain with abnormal pulmonary function for the rest of their lives.

References

1. Northway Jr., W.H., Rosan, R.C., and Porter, D.Y. Pulmonary Disease Following Respirator Therapy of Hyaline Membrane Disease, N. Engl. J. Med. 276:357, 1967.
2. Rhodes, P.G., Hall, R.T., and Leonidas, J.C. Chronic Pulmonary Disease in Neonates with Assisted Ventilation, Pediatrics 55:788, 1975.
3. Harrod, J.R., L'Heureux, P., and Wangensteen, O.D., et al: Long-term Follow-up of Severe Respiratory Distress Syndrome Treated with IPPB, J. Pediatr. 84:277, 1974.
4. Edwards, D.K., Dyer, W.M., and Northway Jr., W.H. Twelve Years' Experience with Bronchopulmonary Dysplasia, Pediatrics 59:839, 1977.
5. Brown, E.R., Stark, A., and Sosenko, I, et al: Bronchopulmonary Dysplasia: Possible Relationship to Pulmonary Edema. J. Pediatr. 92:982, 1978.
6. Bancalari, E., Abdenour, G.E., and Feller, R., et al: Bronchopulmonary Dysplasia. Clinical Presentation, J. Pediatr. 95:819, 1979.
7. Philip, A.G.: Oxygen Plus Pressure Plus Time: Etiology of Bronchopulmonary Dysplasia, Pediatrics 55:44, 1975.
8. Melnick, G.; Pickoff, A.S., and Ferrer, P.L., et al: Normal Pulmonary Vascular Resistance and Left Ventricular Hypertrophy in Young Infants with Bronchopulmonary Dysplasia: Echocardiographic and Pathologic Study, Pediatrics 66:589, 1980.
9. Fouron, J.C.; Le Guennec, J.C., and Villemant, D., et al: Value of Echocardiography in Assessing Outcome of Bronchopulmonary Dysplasia of Newborn, Pediatrics 65:529, 1980.
10. Halliday, H.L.; Dumpit, F.M., and Brady, J.P.: Effects of Inspired Oxygen on Echocardiographic Assessment of Pulmonary Vascular Resistance and Myocardial Contractility in Bronchopulmonary Dysplasia, Pediatrics 65:536, 1980.
11. Oppermann, H.C., Wille, L., and Bleyl, U., et al: Bronchopulmonary Dysplasia in Premature Infants: Radiological and pathological Correlation, Pediat. Radiol. 5:137, 1977.
12. Wung, J.T., Koons, A.H., and Driscoll, J.M., et al: Changing Incidence of Bronchopulmonary Dysplasia, J. Pediatr. 85:845, 1979.
13. Edwards, D.K.: Radiographic Aspects of Bronchopulmonary Dysplasia, J. Pediatr. 85:823, 1979.
14. Watts, J.L., Ariagno, R.L., and Brady, J.P.: Chronic Pulmonary Disease in Neonates After Artificial Ventilation: Distribution of Ventilation and Pulmonary Interstitial Emphysema, Pediatrics 60:273, 1977.
15. Gerhardt, T. and Bancalari, E. Personal communication.
16. Barnes, N.D., Hull, D., and Glover, W.J., et al: Effects of Prolonged Positive-Pressure Ventilation in Infancy, Lancet 2:1096, 1969.
17. Stocks, J.; Godfrey, S., and Reynolds, E.O.R. Airway Resistance in Infants After Various Treatments for Hyaline Membrane Disease: Special Emphasis on Prolonged High Levels of Inspired Oxygen, Pediatrics 61:178, 1978.

18. Bryan, M.H.; Hardie, M.J., and Reilly, B.J., et al: Pulmonary Function Studies During the First Year of Life in Infants Recovering from the Respiratory Distress Syndrome, Pediatrics 52:169, 1973.
19. Winter, P.M. and Smith, G.: Toxicity of Oxygen, Anesthesiology 37:210, 1972.
20. Hellström, B. and Nergardh, A.: Effect of High Oxygen Concentrations and Hypothermia on Lung of Newborn Mouse, Acta Paediatr. Scand. S4:457, 1965.
21. Taghizadeh, A. and Reynolds, E.O.R.: Pathogenesis of Bronchopulmonary Dysplasia Following Hyaline Membrane Disease, Am. J. Pathol. 82:241, 1976.
22. Bancalari, E.; Jesse M.J., and Gelband, H., et al: Lung Mechanics in Congenital Heart Disease with Increased and Decreased Pulmonary Blood Flow, J. Pediatr. 90:192, 1977.
23. Reynolds, E.O.R. and Taghizadeh, A.: Improved Prognosis of Infants Mechanically Ventilated for Hyaline Membrane Disease, Arch. Dis. Child. 49:505, 1974.
24. Gerhardt, T. and Bancalari, E.: Lung Compliance in Neonates with Patent Ductus Arteriosus Before and After Surgical Ligation, Biol. Neonate 38:96, 1980.
25. Merritt, T.A., DiSessa, T.G., and Feldman, B.H., et al: Closure of Patent Ductus Arteriosus with Ligation and Indomethacin: Consecutive Experience, J. Pediatr. 93:639, 1978.
26. Cotton, R.B.; Stahlman, M.T., and Bender, H.W., et al: Randomized Trial of Early Closure of Symptomatic Patent Ductus Arteriosus in Small Preterm Infants, J. Pediatr. 93:647, 1978.
27. Pinney, M.A. and Cotton, E.K.: Home Management of Bronchopulmonary Dysplasia, Pediatrics 58:856, 1976.
28. Sniderman, S.; Chung, M., and Roth, R., et al: Treatment of Neonatal Chronic Lung Disease with Furosemide, Clin. Res. 26:201A, 1978 (Abstract).
29. Noble, M.I.M.; Trenchard, D., and Guz, A.: Value of Diuretics in Respiratory Failure, Lancet 2:257, 1966.
30. Rooklin, A.R.; Moomjian, A.S., and Shutack, J.G., et al: Theophylline Therapy in Brochopulmonary Dysplasia, J. Pediatr. 95:882, 1979.
31. Johnson, J.D.; Malachowski, N.C., and Grobstein, R., et al: Prognosis of Children Surviving with Aid of Mechanical Ventilation in Newborn Period, J. Pediatr. 84:272, 1974.
32. Smyth, J.A., Tabachnik, E., and Duncan, W.J., et al: Cardiopulmonary Abnormalities in Long-term Survivors of Bronchopulmonary Dysplasia, (Abst.) Pediat. Res. 14:651, 1980.

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Neonatal hematological problems

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ABSTRACT: Hematological development in the neonate is unique to the neonate, and when disordered, poses problems about which the physician caring for such individuals should be well versed. Untoward hematologic events in the immediate neonatal period should be carefully assessed in order to determine both extent of involvement as well as temporal sequences as a prelude to embarking upon appropriate therapeutic endeavors, be they replacement therapy or surgical correction. Anemias of underproduction should be assessed in terms of all potential etiologic factors including nutrition, genetic and endocrine disturbance; and equal attention to detail should be carried out in determining causation of anemia due to hemolytic disease, i.e., blood group incompatibility, membrane or enzyme abnormalities. White cell disorders, although uncommon, mandate careful assessment in order to distinguish between age-related maturational defects and those with life threatening results. Once all appropriate data are processed, it is important to recognize the value and the hazards of transfusion in order to avoid unnecessary reaction and/or occurrence of untoward immunologically related events.

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Beginning in the second week of gestation, primitive megaloblastoid blood islands develop from the yolk sac. By ten weeks hematopoiesis shifts to the liver, and thence at 24 weeks to the spleen, thymus and lymph nodes. Not until the last trimester does the bone marrow become the major blood cell production site. Early, 80% of the red blood cells are reticulocytes and decreases by 30 weeks to 4%. Granulocyte counts are constant through the first 26-30 weeks and then rise to adult levels by 34 weeks whereas lymphocyte counts remain at ⅔ of term levels until the latter part of the third trimester. Circulating platelets are present by 11 weeks and attain term values by 34 weeks.

The high hemoglobin value in intrauterine life and its associated high fetal hemoglobin percentage not only facilitates transplacental oxygen exchange but is also a major initial iron source. For the term infant, it can sustain iron requirements for the first 3-4 months. In both term and premature infants, leukocyte counts tend to be elevated and immature myeloid forms are common; whereas platelet counts tend to be low normal, especially in premature infants. By one month of postnatal life, with a nadir by 2-3 months, suppression of erythropoiesis occurs which, in combination with growth related blood volume expansion, results in lowered hemoglobin concentrations. In premature infants, the nadir is even lower because of the relatively greater increase in weight and the lesser endowment in initial hemoglobin values.

Anemia secondary to blood loss • Evaluation of the actively bleeding newborn should include a careful assessment of the extent of bleeding and the correspondingly appropriate laboratory procedures. Thus,

in thrombocytopenia, only the platelet count is abnormal. In vitamin K deficiency, both PT and PTT are prolonged. In hemophilia, PTT is prolonged and factor VIII (or IX) levels decreased. In DIC, all are abnormal. In bleeding secondary to severe liver disease, PT, PTT and fibrinogen are abnormal, platelets are often decreased and factor VIII levels are either normal or moderately increased. With infection not associated with DIC, the platelet count is often decreased and fibrinogen and factor VIII levels are increased.

Intrauterine hemorrhage, i.e., via transplacental loss into the maternal circulation, may result in profound anemia in the newborn. It is the major pathogenetic mechanism for immune hemolytic disease due to rhesus and major red blood cell group sensitization. Twin-twin transfusion is yet another cause of anemia. Monochorial placentas occur in approximately 70% of monovular twin pregnancies and most have significant degrees of a-v anastamoses. Obstetric hemorrhage as a cause of a major anemia occurs in appoximately 1 in 1,000 live births.

Treatment depends on symptoms at delivery. Acute blood loss is usually followed by hypovolemic shock and is best treated by rapid transfusion of 10-20 ml/kg of fresh whole blood to raise the hematocrit to 35%. In chronic blood loss with severe anemia, volume may be normal or increased. In the latter case it is best to carry out a modified exchange transfusion using fresh, type specific, whole blood or reconstituted packed cells. In the former, packed cell transfusion is appropriate. In life threatening emergency only, may one use nonmatched, low titered, 0 negative cells. While awaiting proper crossmatch, plasma expanders including dextran, fresh frozen plasma, or albumin may be used. Iron therapy is mandated following transfusion and can be by short term parenteral administration or orally administered elemental iron (3-5 mg/kg over the ensuing three months).

Postnatal hemorrhage is often the result of an underlying anatomical problem compounded by birth trauma. The first indication of hemorrhage may be sudden onset of hypovolemic shock in a child who at birth appeared normal. Hemorrhage into the scalp usually occurs in association with caput succedaneum and is usually mild. Commonly, especially in premature infants, are intracranial/intraventricular hemorrhages, but virtually all organs may be the site of life-threatening hemorrhage.

In bleeding due to congenital coagulation disorders, the most common causes are x-linked clotting deficiencies, i.e., classic hemophilia (factor VIII) and Christmas disease (factor IX). Diagnosis is made by specific factor assay. Delayed bleeding at three or four days of age, usually at the umbilical stump, may be due to fibrin stabilizing factor (factor XIII) deficiency, which is identified by clot solubility in 6 M urea. Factors VIII and IX deficiencies are treated by specific factor replacement and factor XIII deficiency by fresh (frozen) plasma. With the advent of routine vitamin K injections, vitamin K dependent clotting factor deficiency is rare. However, prolonged antibiotic usage may interfere with vitamin K synthesis; thereby necessitating constant surveillance of prothrombin times and appropriately timed vitamin K administration in infants so treated.

Thrombocytopenic bleeding rarely occurs above levels of 30,000/mm^3. The mechanism of immune thrombocytopenia (with an attack rate of 3/10,000) is similar to that seen in Rh erythroblastosis, i.e., IgG platelet antibodies cross the placenta, coat platelets and effect their rapid removal, usually by the spleen, less commonly by the liver. Autoimmune thrombocytopenia is invariably the result of passively transferred antiplatelet IgG from a mother with a thrombocytopenic-related immune disorder, i.e., lupus. One must anticipate severe thrombocytopenia in mother with a known history of thrombocytopenia, compensated or not, and one who has unequivocal evidence of circulating platelet antibodies. Infants of such mothers are considered at high risk. Efforts to bring such infants to term should be tempered with the knowledge that with approach of term there is a greater chance for more antibody to cross the placenta. The risk for severe bleeding during passage through the birth canal formerly mandated delivery via cesearean section, an operation which is not without risk for the thrombocytopenic mother. Platelet transfusion should be administered to the mother prior to delivery by cesearean section. A less traumatic alternative is to obtain an infant scalp vein platelet count at the time of cervical effacement. Counts in excess of 100,000/mm^3 should allow vaginal delivery to proceed. With lower levels, cesearean section can be elected. There is no evidence to favor steroid administration. The disease is self-limited and the likelihood of spontaneous bleeding is extremely low.

In isoimmune disease, the antibody attacks PL^{AL} positive platelets. In the absence of readily available PL^{AL} negative donors, a ready source is the mother's platelets, but these must be serum-free lest a large antibody burden be transfused. With severe bleeding, exchange transfusion with platelet-rich fresh whole blood is an effective alternative.

Congenital megakaryocytic aplasia is an extremely rare, usually fatal, disorder. Megakaryocytic hypoplasia, as in the thrombocytopenia absent radii syndrome, is usually nonfatal, and if patients survive the first year there is an excellent chance that platelet counts will ultimately exceed 50,000/mm^3. Thrombocytopenia is a common finding in the Wiskott-Aldrich syndrome, in translocations 13

and 18 and, on occasion, in the Schwachman syndrome. It may also be a harbinger of infection. In effect, any thrombocytopenic neonate should be screened for intrauterine infections.

Thrombocytopenia is one of the hallmarks of disseminated intravascular coagulation (DIC). While searching for an underlying cause, treatment of DIC is essentially supportive. Fresh plasma (10cc/kg) and fresh platelet transfusions (4 units/m^2) usually provide effective control. In severe unremitting conditions, fresh whole blood exchange transfusions offer the added advantage of removing fibrin split products which tend to perpetuate the ongoing process.

Anemias of underproduction • Congenital hypoplastic anemia (CHA) is usually apparent in the first month of life. Features, in addition to red cell aplasia, include persistence of fetal hemoglobin, elevated mean corpuscular volume (usually $>100\ um^3$) and suppression or loss of the "i" antigen. Sixty percent of patients respond to corticosteroid therapy when initiated early. The usual dose is 1-3 mg prednisone/kg of bodyweight. Occasionally high doses are needed but once a response is obtained, manipulation of the dose and schedule may be possible. Fifty percent of these patients may discontinue therapy in five years. In some the disease disappears with the onset of puberty. In others steroid dependence persists. Androgens are not effective. For the transfusion-dependent patient, concomitant desferoxamine administered via daily subcutaneous injection in a 100-500 mg dose is necessary in order to lessen the severe sequelae of iron overload. Neither vitamin C nor splenectomy has therapeutic value save for those who develop transfusion-induced hypersplenism. For steroid dependent (or nonresponsive) patients, marrow transplantation should be considered providing there is an available HLA identical, MLC nonreactive donor.

The anemias of endocrine deficiency, albeit rare, readily respond to specific therapy. In osteopetrosis, defective osteoclast function results in bone overgrowth and loss of marrow space. Marrow transplantation results in normal osteoclast function, bone remodeling and marrow restoration.

Constitutional pancytopenia or Fanconi's anemia rarely presents before six months of life and is characterized by total marrow underproduction, chromosomal breakage, defective chromatid exchanges and endoreduplications. Of these patients, 7-10% develop monocytic or monomyelocytic leukemia. Associated defects include hyperpigmentation; absent or hypoplastic thumbs, radii, carpal bones; microthalmia, microcephaly, short stature, strabismus and developmental abnormalities of the ears and kidneys. In many androgen therapy will improve erythroid production and, to a lesser extent, granulocyte and platelet production but requires careful monitoring because of potential hepatotoxicity and late occurring hepatic carcinoma. Corticosteroids are not effective. For the transfusion dependent patient, iron chelation is necessary. The familial variant of constitutional aplastic anemia differs only in the lack of skeletal and chromosomal abnormalities. Both disorders are best treated by marrow transplantation.

Idiopathic acquired aplastic anemia rarely occurs in the neonate, has an unpredictable response to either corticosteroids or androgens and is best treated by marrow transplantation. Data suggest that antithymocyte globulin may effect cures in patients with identifiable T-cell mediated defects.

Folic acid and vitamin B_{12} deficiency may also produce anemia in the newborn. Neither folate nor B_{12} requirements for premature infants are met by the amounts present in otherwise unmodified cow's milk preparations, and it is appropriate to provide such supplements during the first 2-3 months of extrauterine life. Vitamin B_{12} deficiency may follow maternally induced deficiency, malabsorption defects and juvenile pernicious anemia. Congenital folate deficiency is rare. However nutritional deprivation may occur, particularly in infants fed goat's milk which is low in folate.

Anemia due to increased red cell destruction • Isoimmune hemolytic disease occurs when maternal IgG crosses the placenta and targets onto specific red cell receptors. The commonest examples are Rh and ABO incompatibility. The Rh (D or rhesus) system includes three closely linked genes (C, D and E) that segregate as alleles. D is the most potent. Anti-D hemolytic disease is rare in orientals and blacks. The severity of Rh hemolytic disease, in general, worsens with each successive pregnancy.

Spectrophotometric assessment of bilirubin in amniotic fluid performed at about 21 weeks gestation and repeated every 7-21 days is the best way to determine the need for intervention. When repetitively high levels are identified early, intrauterine transfusions can be administered until such time as acceptable maturity permits delivery. With this procedure, washed, packed, type 0, Rh negative red blood cells are used following 3000 r irradiation (in order to reduce the risk of lymphocyte engraftment and subsequent occurrence of graft versus host disease). Other minor blood group incompatibilities include Kell, Duffy, Lewis, and Kidd.

ABO incompatibility is now the most common cause of isoimmune hemolysis because of the effective use of Rh desensitization prophylaxis. In both Rh and ABO disease, the antibody (IgG, 7S) is "incomplete," produces lysis in the reticuloendothelial

system and is serologically identified with a positive direct Coombs test. Blood films typically reveal active erythropoiesis with polychromasia, reticulocytosis and nucleated red cells (and in ABO incompatibility, densely stained microspherocytes). Treatment is directed at reducing the level of unconjugated bilirubin and correcting the anemia, the former in order to reduce the likelihood of bile accumulation in the fatty deposits of the central nervous system and the resultant neurologic sequellae of kernicterus. Kernicterus rarely occurs at levels below 20 mg% indirect bilirubin in term, and otherwise healthy, infants. In premature, or otherwise compromised, infants, kernicterus will occur at lower levels, even in the absence of hemolytic disease.

Effective therapy is a 1½ volume exchange transfusion with nonsensitizable cells. Effective bilirubin conjugation in the mature newborn rarely occurs before the third day of life. Thus, if the plotted bilirubin rise projects a level $>$ 20 mg% before two days of life, exchange transfusion should be undertaken. If cord blood hemoglobin is $<$ 12 gm% and/or the bilirubin is $>$6.0 mg%, exchange transfusion should be immediate. In the premature infant, the projected bilirubin at age two days should not exceed 13-15 mg%. Repeat exchanges are needed if the bilirubin level on successive determinations, six hours apart, projects a rate of rise which would lead into the undesirable range.

Congenital red cell membrane disorders resulting in hemolysis and hyperbilirubinemia include spherocytosis, elliptocytosis, and stomatocytosis. Hereditary spherocytosis is an incomplete dominant affecting about 1 in 5,000 infants, is most common among northern Europeans and often results in increased neonatal jaundice sufficient to require exchange transfusion. Unlike the microspherocytes of ABO disease, the spherocytes of hereditary spherocytosis are Coombs negative. Both are osmotically fragile. Hereditary elliptocytosis is more common than hereditary spherocytosis, does not usually produce severe anemia, but may cause profound bilirubinemia. The cells are striking in their cigar-shaped appearance and diminished resistance to osmotic lysis. Hereditary stomatocytosis is an autosomal recessive disorder characterized by swollen and cup-shaped red cells with defective ionic permeability. Splenectomy will reduce the rate of hemolysis. This disorder, as in other membrane disorders, may be accompanied by significant hyperbilirubinemia in the newborn.

Hemolysis due to vitamin E deficiency is due to red cell membrane phosphatidyl ethanolamine loss which causes increased red cell fragility in H_2O_2. Deficiency of vitamin E, which functions as an antioxidant, is exaggerated by diets rich in polyunsaturated fatty acids (PUFA) and/or early administration of oxidants such as iron. Serum vitamin E levels are especially low, i.e., 0.3-0.7 mg% in the premature infant. By providing supplemental tocopherol and delaying iron administration it is possible to diminish the risk for hemolysis. Glutathione peroxidase (GSH-Px), the selenium dependent enzyme, functions in concert with tocopherol in maintenance of red cell stability.

Polycythemia • Polycythemia in the neonate may follow upon twin-twin transfusion, maternal-fetal transfusion, excessive delays in cord clamping, placental insufficiency, adrenal hyperplasia, thyrotoxicosis, and also may be seen in infants of diabetic mothers, Down's syndrome and the Beckwith-Wiedemann syndrome. In severe cases, findings include respiratory distress, cyanosis, seizures and diffuse thrombotic disease. Symptoms relate primarily to increased blood viscosity and therapy should be directed to those who are obviously symptomatic or, empirically, those whose hematocrits exceed 70%. The most effective approach is partial exchange transfusion with fresh frozen plasma designed to reduce the hematocrit to an acceptable level of 55% or less. Defective oxygenation, as in cardiac anomalies, high 0_2 affinity hemoglobinopathies or enzyme deficiency-induced methemoglobinemia will also result in polycythemia.

Disorders of granulocytes and monocytes • Absolute neutrophil counts $<$ 1,000/mm^3 constitute neutropenia. Severe infection, as in necrotizing enterocolitis, may cause massive migration of neutrophils into the gastrointestinal tract and deplete the marrow reserves. Immune neutropenia is etiologically similar to isoimmune hemolytic or thrombocytolytic disease, is transient and, if the patient does not acquire infection, invariably benign. In autoimmune neutropenia, antibodies tend not to disappear, patients remain chronically neutropenic and often succumb to severe bacterial infections. Transplacentally acquired drug-induced neutropenia may occur following maternal ingestion of a variety of drugs including sulfonamides, semisynthetic penicillins and propylthiouracil.

Neutropenia due to marrow underproduction is the result of disordered regulation of myelopoiesis. In the cyclic variety, increased numbers of monocytes are identified at the nadir of the neutrophil count. In congenital absence of neutrophil precursors, monocytes are not increased. Neutropenia has alos been described in patients with Schwachman-Diamond syndrome which may closely mimic cystic fibrosis (although the sweat test is normal). Kostmann's syndrome, i.e., infantile genetic agranulocytosis, is a severe form of hereditary neutropenia which is inherited as an autosomal recessive.

Marked degrees of monocytosis are characteristic of this disease and may afford partial protection against infection.

Fatal granulocytopenic disorder is the syndrome of reticular dysgenesis which includes diminished T and B lymphocyte function. Presentation occurs in early infancy, and death due to infection is usually rapid in the absence of a compatible marrow transplant donor. Included among the functional phagocytic disorders are the "lazy leukocyte syndrome" and the defective killing syndromes. The former is characterized by defective neutrophil motility and an otherwise normal marrow. Syndromes with defective killing include chronic granulomatous disease (loss of superoxide or H_2O_2 production) and Chediak-Higashi syndrome.

Blood replacement therapy • *Red cell transfusions:* In planning transfusions for acute blood loss, knowledge of the estimated blood volume and central venous pressure is fundamental. In the premature infant the blood volume range of 100-115 ml/kg is about 15 ml higher than the range in term infants. Blood pressure, pulse and hematocrit values are unreliable and variable. For acute blood loss, one should transfuse with 20 ml/kg of whole blood and for chronic blood loss in the absence of heart failure 10 ml/kg of packed cells slowly. With failure, a modified exchange transfusion with packed cells is mandated. In transfusing to a specific hemoglobin value, the following formula is useful:

$$\text{Cell Volume (ml)} = \frac{\text{Pt. wt. (kg)} \times \text{blood vol. (ml/kg)} \times \text{(desired Hgb-observed Hgb)}}{\text{Hgb (gm/dl) of packed cells}}$$

Platelet transfusion: Type specific single donor platelets are preferred and for isoimmune disease nonsensitizable platelets should be used. All donor samples should be less than 48 hours old. As a rule, each 50 ml collection contains 5-8 $\times$ 10^{10} platelets. Thus, a bleeding thrombocytopenic neonate with a blood volume of 250 ml and a platelet count of 5,000/mm^3 (0.5×10^4/mm^3) has a total platelet count of 0.5×10^7/ml $\times$ 250, or 0.125×10^{10}/ml. One platelet unit contains 5×10^{10} platelets or with 70% viability, 3.5×10^{10} platelets which should thus increase the platelet count by more than ten times. An even simpler rule is to request 3-4 units/m^2. In all cases, the donor should not have ingested aspirin or other platelet function depressants in the previous seven days.

Granulocyte transfusion: Granulocyte transfusions are useful for gram negative infections in patients with absolute granulocyte counts below 500/mm^3 and should be administered daily for five days. They appear to offer advantage for gram positive bacterial, fungal, parasitic or viral infections. In general, 4-8 liters of processed blood yield 5×10^9 granulocytes/mm^3. Febrile reactions can be controlled with steroids and antihistamines. For uncontrolled "shaking", demerol is effective.

Ideally all blood products administered to neonates should be irradiated in order to avoid the occurrence of graft versus host disease. Several reports strongly suggest the occurrance of AIDS following intrauterine transfusion, exchange transfusion or push transfusion of all blood products. With the recommended dose of 3000R, no data suggest early or late untoward events.

Although of lesser frequency, albeit of even greater morbidity, is the risk for development of the acquired immune deficiency syndrome (AIDS) following transfusion. The etiology of AIDS is unknown. Its occurrence among homosexuals, intravenous drug abusers and hemophiliacs suggests in addition to sexual transmission exposure to blood products. There are at least ten known reports of AIDS in infancy, and it has recently been reported in a 14-month old infant eight months before the donor became symptomatic. AIDS is a newly uncovered disorder which may have been present undiagnosed for many years. With more detailed epidemiologic and immunologic studies, the etiology will likely become clear but until such time careful attention must be paid to the need to transfuse.

Bibliography

Introduction

1. Monroe, B., and others; Neonatal Blood Count in Healtb and Disease 1 Reference Values for Neutrophilic Cells, J Pediatr 95:89, 1979
2. Schulman, I : Characteristics of Blood in Foetal Life: Oxygen Supply to Human Foetus, Oxford, 1959, Blackwell Scientific Publications Ltd
3. Xanthou, M Leukocyte Blood Picture in Healtby Full Term and Premature Babies During Neonatal Life, Arch. Dis Child, 43:242, 1970.

Anemia Secondary to Blood Loss

4. Anthony, B , and Krivit, W : Neonatal Thromhocytopenic Purpura, Pediatrics 30:766, 1962.
5. Bergstedt, J : Monozygotic Twins, One with High Erythrocytic Values and Jaundice, the Other with Anemia Neonatorum and no Jaundice, Acta Pediatr. 46:201, 1957
6. Bleyer, W.A.; Hakami, N , and Shepard, T H.: Development of Hemostasis in Human Fetus and Newborn Infant, J. Pediatr 79:838, 1971
7. Hall, J F., and others: Thrombocytopenia with Absent Radius, Medicine 48:411, 1969
8. McIntosh, S., and others. Neonatal Isoimmune Purpura Response to Platelet Infusions, J Pediatr 82:1020, 1973.
9. Merskey, C : Defibrination Syndrome or . ? Blood 41:599, 1973
10. Oski, F A and Naiman, J L.: Hematological Problems in Newborn, ed 2, Philadelphia, 1972, W B Saunders Co
11. Stuart, M J Platelet Function in Neonate, Am. J Pediatr Hem /Onc 1:227, 1979
12. Yac, A C., and Lind, J Placental Transfusion, Am J. Dis Cbild 127:128, 1974.
13. Zipursky, A , and others: Clinical and Laboratory Diagnosis of Hemostatic Disorders in Newborn Infants, Am J. Pediatr. Hem /Onc. 1:217, 1979.

Anemias of Underproduction

14. Adamson, J W , and others: Erythrocytosis Associated with Hemoglobin Rainier: Oxygen Equilihria and Marrow Regulation, Clin Invest. 48:1376, 1969
15. Coccia, P F., and others Successful Bone-Marrow Transplantation for Infantile Malignant Osteopetrosis, N Engl J. Med 302:701, 1980
16. Diamond, L K , and others: Congenital (Erythroid) Hypoplastic Anemia, Am. J Dis Cbild 102:403, 1961

17. Fanconi, G.: Familial Constitutional Panmyelocytopathy, Fanconi's Anemia. I. Clinical Aspects, Semin. Hematol. 4:233, 1967.
18. Gross, S., and Melhorn, D.K.: Vitamin E, Red Cell Lipids and Red Cell Stability in Prematurity, Ann. N Y. Acad Sci. 203:141, 1972.
19. Hadjimarkos, D.M.: Selenium Content of Human Milk: Possible Effect on Dental Caries, J. Pediatr. 63:273, 1963.
20. Jakami, N., and others: Neonatal Megaloblastic Anemia Due to Inherited Transcobalamin. II Deficiency in Two Siblings, N. Engl. J. Med. 285:1163, 1971.
21. Humbert, J.R., and others: Polycythemia in Small for Gestational Age Infants, J. Pediatr 75:812, 1969.
22. Lampkin, B., and others: Megaloblastic Anemia of Infancy Secondary to Maternal Pernicious Anemia, N. Engl. J. Med 274.1168, 1966.
23. Michael, A.F. Jr., and Mauer, A.M.: Maternal-Fetal Transfusion as Cause of Plethora in Neonatal Period, Pediatrics 28:458, 1961
24. Shojania, A.M., and Gross, S.: Folic Acid Deficiency and Prematurity, J. Pediatr. 64:323, 1964
25. Thomes, E.D., and others: Aplastic Anemia Treated by Marrow Transplantation, Lancet 1:284, 1972.

Anemias Due to Increased Red Cell Destruction

26. Bowman, J.M.: Rh Erythroblastosis Fetalis 1;97S, Semin. Hematol. 12:189, 197S.
27. Broderson, R.: Bilirubin Transport in Newborn Infant, Reviewed with Relation to Kernicterus, J. Pediatr. 96:349, 1980.
28. Cohen, F., and others: Mechanisms of Isoimmunization. 1. Transplacental Passage of Fetal Erythrocytes in Hemospecific Pregnancies, Blood 23:621, 1964.
29. Cutting, H.O., and others: Autosomal Dominant Hemolytic Anemia Characterized by Ovalocytosis: Family Study of Seven Involved Members, Am. J. Med. 39:21, 1965.
30. Desiardins, L., and others: Spectrum of ABO Hemolytic Disease of Newborn Infant, J. Pediatr. 95:447, 1979.
31. Hardyment, A.F., and others: Follow-Up of Intrauterine Transfused Surviving Children, Am. J. Obstet. Gynecol. 133:23S, 1979.
32. Jacob, H.S.: Hereditary Spherocytosis: Disease of Red Cell Membrane, Semin. Hematol. 2:139, 196S.
33. Mentzer, W.C.; Lubin, B.H., and Emmons, S.: Correction of Permeability Defect in Hereditary Stomatocytosis by Dimethyl Adipimidate, N. Engl. J. Med. 294: 1200, 1976.
34. Miyazaki, S., and others: Coombs Positive Hemolytic Anemia in Congenital Rubella, J. Pediatr. 94:759, 1979.
35. Valaes, T., and Hyte, M.: Effect of Exchange Transfusion on Bilirubin Binding, Pediatrics S9:881, 1977.
36. Van Praagh, R.: Diagnosis of Kernicterus in Neonatal Period, Pediatrics 28:870, 1961.

Disorders of Granulocytes and Monocyte Cells

37. Blume, R.S., and Wolff, S.M.: Chediak-Higashi Syndrome: Studies in Four Patients and Review of Literature, Medicine 51:247, 1972.
38. Gotoff, S.P.: Neonatal Immunity, J. Pediatr. 8S:149, 1974
39. Stoerner, J.W., and others: Polymorphonuclear Leukocyte Function in Newborn Infants, J. Pediatr. 93:862, 1978.

Blood Replacement Therapy

40. Parkman, R.; Mosier, D.; Umansky, I.; Cochran, W.; Carpenter, C.B., and Rosen, F.S.: Graft-versus-Host-Disease After Intrauterine and Exchange Transfusions for Hemolytic Disease of Newborn, N. Engl. J. Med. 290-3S9, 1974.
41. Naiman, J.L.; Punnett, H.H.; Lischner, H.W.; Destine, M.L., and Arey, J.B.: Possible Graft-versus-Host Reaction After Intrauterine Transfusion for Erythroblastosis Fetalis, N Engl. J. Med. 281:697, 1969.
42. Morhenn, V.B., and Maibach, H.I.: Graft-versus-Host Reaction in Newborn, Acta. Derm. Vernereol. S4:133, 1974.
43. Grogan, T.M.; Broughton, D D., and Doyle, W F.: Graft-Versus-Host Reaction (GVHR): Case Report Suggesting GVHR Occurred as Result of Maternofetal Cell Transfer, Arch. Pathol. 99:330, 197S.
44. Bohm, N.; Kleine, W., and Enzel, U.: Graft-versus-Host -Disease in Two Newborns After Repeated Blood Transfusions Because of Rhesus Incompatibility, Beitr. Pathol. 160:381, 1977.
45. Unexplained Immunodeficiency and Opportunistic Infections in Infants — New York, New Jersey, California, MMWR 31(49):66S, 1982.

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Management of renal failure: Emphasis on peritoneal dialysis in the neonate

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ABSTRACT: Intrinsic renal failure in the neonate is an infrequent problem that may be successfully treated by judicious and early acute peritoneal dialysis. Three infants, between 0.7 and 4.0 kg in weight, two of which were premature, were successfully dialyzed from one to 12 days. Indications for dialysis were severe hyperkalemia, hypernatremia or hyponatremia or fluid overload. Correction of fluid status, serum sodium, potassium and creatinine was achieved. Glucose and base were absorbed from the dialysate. Complications included catheter malfunction, peritonitis and hemorrhage secondary to liver margin puncture. Indications for, techniques of and complications of acute peritoneal dialysis in neonates are discussed. Early institution of peritoneal dialysis in carefully selected cases can improve the outcomes in neonates with acute intrinsic renal failure.

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The marked decline in neonatal mortality and morbidity during the past decade has been partly due to a more aggressive approach in management of the premature and ill neonate. Early surgical ligation of the patent ductus arteriosus, ventriculoperitoneal shunts for intraventricular hemorrhage and hydrocephalus, and the placement of indwelling central venous catheters for long-term parenteral nutrition are common procedures. This aggressive approach does not appear to have been extended to the management of infants in renal failure, as evidenced by the scant attention given to peritoneal dialysis in recent review articles. This paper describes three patients with acute intrinsic renal failure that were managed with peritoneal dialysis.

Case 1. — A 710 gram 25-week gestation Caucasian male infant was delivered in an emergency room after spontaneous onset of labor. Following resuscitation with bag and mask oxygen and tracheal intubation the infant was transferred to the regional neonatal intensive care unit.

On physical examination there were generalized ecchymoses of the extremities, poor peripheral perfusion, a mean arterial blood pressure of 33 mm Hg, pulse rate 178 per minute and temperature 98.4F. Mechanical ventilator support was continued. Over the next 48 hours there was decreased urinary output despite two fluid challenges of colloid infused at volumes of 20 ml/kg. Severe electrolyte imbalance occurred (Na = 163 mEq/l, K = 11.6 mEq/l, Cl = 110 mEq/l, bicarbonate 13 mEq/l, blood pH = 7.14, BUN = 71 mg/dl and creatinine = 3.2 mg/dl). Complete heart block and seizures developed. The presence of associated intrinsic renal failure was indicated by two criteria: the renal failure index was 70 (prerenal less than 2.5) and fractional excretion of sodium was 43% (prerenal less than 2.5%) (Table 1).

Peritoneal dialysis was initiated for management of the hyperkalemia, hypernatremia and severe metabolic acidosis (Table 1). For this purpose dialysate containing

TABLE I.—Indications For and Results of Dialysis.

CASE	Relation to dialysis	RFI	FENa %	Na mEq/1	K mEq/1	Weight kg	Glucose mg/d1	Bicarbonate mEq/	BUN mg/d1	Cr mg/d1
1	pre	70	43	163*	11.6*	0.7	97	13	71	3.2
	during	—	—	147#	4.8#	0.7	353	20#	60**	2.9**
2	pre	33	28	120*	7.5*	2.1*	231	23	65	5.5
	during	—	—	142#	4.5#	1.5#	108	28	37#	2.2#
3	pre	48	37	127	5.9	5.1*	129	25	64	7.2
	during	—	—	137#	3.8#	4.1#	103	21	12#	1.8#

* Indication for initiating dialysis

\# Successful treatment

** Prior to resumption of urinary output

RFI = Renal Failure Index

FENa = Fractional Excretion of sodium

1.5% dextrose was exchanged through a modified adult-size acute peritoneal dialysis catheter after mild distention of the abdomen to separate loops of bowel with 7 ml of dialysate introduced via a #22 angiocath.

Cycles of 20 ml volume were performed each hour for 30 hours. Optimum volumes of 30-40 ml/kg (25-28 ml in this infant) were not possible to maintain because of worsening respiratory insufficiency when 25 ml was infused. No potassium was added to the dialysate but heparin ¼ unit per ml was added.

Normal sinus rhythm returned within one hour and the electrolytes, BUN and creatinine improved (Na = 147 mEq/l, K = 4.8 mEq/l, bicarbonate 20 mEq/l and blood pH 7.33). The seizures stopped. Urinary output resumed after 13 hours of dialysis. After 30 hours of dialysis, urine volume was 4.5 ml/kg/hr. Hyperglycemia developed (serum glucose 353 mg/dl) (Table 2) and dialysis was discontinued. Over the 30 hours of dialysis, a total of 600 ml of dialysate was infused and drained out. Analysis of the drainage showed removal of 4.2 mEq sodium (4.8 mEq/kg/d), 1.7 mEq potassium (1.9 mEq/kg/d), 170 mg of urea nitrogen. Nearly 3 grams of dextose was retained by the patient (3.3 gm/kg/d) and base was utilized at a rate of 16.5 mEq/kg/d (Table 3 shows maximum daily values.)

TABLE 2.—Complications of Dialysis.

Case 1
Hyperglycemia

Case 2
Catheter malfunction (catheter #1)
Peritonitis (Staphylococcus epidermidis)
Catheter leak (catheter #2)

Case 3
Liver puncture, hemorrhage and catheter malfunction
Peritonitis (gram negative bacillus), septicemia?

TABLE 3.—Maximum Effects of Dialysis per 24 Hour Period - Separate days possible.

Case	1	2	3
Dialysate volume (ml/kg dry wtg.)	28	40	30
Fluid removed (ml/kg/hr)	0	4.9	4.6
Sodium removed (mEq/kg/d)	12	13	16
Chloride removed (mEq/kg/d)	13	9	16
Potassium removed (mEq/kg/d)	7.2	2.3	1.7
Base utilized (mEq/kg/d)	24	27	8
Glucose absorbed (gm/kg/d)	4.4	ND	ND
Urea nitrogen removed (gm/kg/d)	0.3	0.3	0.2
Creatinine removed (mg/kg/d)	10	23	26
Calcium absorbed (mg/kg/d)	7	4	4
Phosphate removed (mg/kg/d)	ND	11	19

ND = Not done

At eight weeks of age, the infant, weighing 1600 grams and requiring no ventilator support, was transferred to a recuperative facility. Urinalysis, electrolytes, blood pressure and GFR were normal at that time. (BUN 3 mg/dl and creatinine 0.5 mg/dl).

Summary • The cause of the acute renal failure in this patient appears to have been acute tubular necrosis secondary to severe perinatal asphyxia and hypotension. Dialysis was initiated to control cardiac arrhythmias, hyperkalemia, hypernatremia and metabolic acidosis. Seizure activity resolved. Removal of fluid was not necessary but sodium and potassium were removed and glucose and base were absorbed by the patient. This dialysis procedure was complicated only by appearance of hyperglycemia.

Case 2. — A 1.78 kilogram female was delivered to a 33 year old woman by emergency C-section following abruptio placenta at 32 weeks gestation. Following delivery the infant was in severe shock and required immediate resuscitation including intermittent mandatory ventilation and fluid replacement. Oliguria was present from birth but GFR was normal (creatinine 1.0 mg/dl) until gross hematuria with clots developed on day 4 of life. Despite conservative management with fluid restriction, marked edema developed. The infant's condition was complicated by a patent ductus arteriosus (PDA) and refractory congestive cardiac failure. On admission to the regional neonatal center at 11 days of age the infant weighed 2.1 kg. She was in cardiopulmonary failure and required mechanical ventilation. Laboratory investigations revealed a BUN = 65 mg/dl, creatinine = 5.5 mg/dl, Na = 120 mEq/l, K = 7.5 mEq/l, bicarbonate 23mEq/l and Cl = 80mEq/l. A voiding cystogram demonstrated a normal bladder. Urinalysis showed 4+ proteinuria and large blood with more than 300 red blood cells per high power field. Urinary sodium excretion was 60 mEq/l and urinary creatinine was 10 mg/dl. The renal failure index was 33 and the fractional excretion of sodium was 27.5% (Table 1). Because of the severe fluid overload, anuria and electrolyte imbalance, peritoneal dialysis was begun on day 11 of life through a modified adult acute peritoneal dialysis catheter (see Discussion). The catheter was placed 2 cm infra-umbilical and sloping laterally and cephalad. There was little bleeding after placement but due to poor catheter drainage it was removed and a second modified catheter was placed 1½ cm above the umbilicus, sloping caudad.

Good exchanges were achieved with the new catheter; 60 ml was instilled without respiratory compromise. Heparin 1 unit per ml was added to the dialysate. An average of 12 ml was removed every one hour cycle as a result of alternating 1.5 and 4.25% dextrose dialysate solutions.

On the second day of dialysis a leak of dialysate occurred around the catheter at its insertion site. Placement of a silk purse-string suture stopped the leakage.

On the third day of dialysis the heparin was decreased to ½ unit per ml of dialysate. By increasing dwell time to 30 minutes per cycle and using 2 cycles with 4.25% with an intervening single 1.5% cycle, 500 gm of weight had been removed over the 3 days of dialysis.

Poor catheter function and increased risk of peritonitis if an acute catheter is left in more than 72 hours prompted discontinuation of dialysis at the end of the third day.

At this time Staphylococcus epidermidis was identified in peritoneal fluid (Table 2). The peritoneal cell count had climbed from 11 to 300 nucleated cells/mm³. The percentage of polymorphonuclear cells (PMN's) climbed from 21 to 58%, this defining peritonitis. (Peritonitis is defined as more than 100 nucleated cells per mm³ plus more than 50% PMN's, see Discussion). Intravenous vancomycin was begun.

Because of continued fluid overload with cardiac failure, a second 3-day course of acute peritoneal dialysis was initiated again using a modified adult catheter in a third location but still in the abdominal midline. Treatment of the peritonitis continued with intraperitoneal oxacillin (100 mg/liter of dialysate). Heparin ½ unit per ml was added to the potassium-free dialysate which was again cycled every hour. KCl 3.5 mEq/l was added the third day. Peritonitis had resolved prior to surgery for the patent ductus arteriosus (PDA): 10 nucleated cells/mm³ and 24% PMN's.

At the time of initiating peritoneal dialysis it was unclear whether the patent ductus arteriosus was the primary cause for the congestive cardiac failure or whether fluid retention as a result of renal failure was aggravating the effect of the patent ductus arteriosus. However, after several days of peritoneal dialysis and removal of fluid it became apparent that the patent ductus was contributing significantly to the congestive cardiac failure and pulmonary edema.

PDA ligation was performed in the neonatal intensive care unit 2½ days into the 2nd dialysis at age 17 days. The fluid in the abdomen was drained out during the surgery. The PDA was found to be twice the diameter of the aorta (8 vs. 4 mm). Dialysis was discontinued after 72 hours. Weight was 1.6 kg.

Urine output from the day of admission to ligation of the PDA was only 7.5 ml per 24 hr (0.2 ml/kg/hr). (Oliguria is less than 0.5 ml/kg/hr). Urine volume following the ligation was 35 ml per 24 hr (0.9 ml/kg/hr). The blood pressure improved. Cardiac failure was controlled, pulmonary edema lessened and the infant was weaned from the ventilator. The renal failure index (RFI) 2 days post ligation was 5.9, indicating continuing but improved intrinsic renal failure.

The diuretic phase of acute tubular necrosis (ATN) was evidenced by high urine flow the third postoperative day: 96 ml/24 h = 2.5 ml/kg/hr. Renal function was still poor: creatinine 2.8 mg/dl. Dry weight of 1.5 kg was reached.

The recovery phase of ATN was demonstrated by gradual fall in serum creatinine to 0.9 mg/dl.

Renal scan at 6 weeks of age demonstrated two kidneys with equal and good function bilaterally. Nutrition improved and the patient was discharged home at 8 weeks of age weighing 2.0 kg. Urinalysis then showed neither hematuria nor proteinuria.

Summary • Hypoxia appeared to led to worsening of PDA shunting which in turn led to prerenal and then intrinsic renal failure. Fluid overload, congestive heart failure, hyponatremia and hyperkalemia were the indications for dialysis. Eventual fluid removal unmasked the severity of the PDA. Sodium and potassium were successfully removed by dialysis. Complications of the dialysis were peritonitis

and poor catheter function (first catheter). The latter required replacement by a second catheter. Catheter leakage was a minor problem.

Case 3. — This 4.4 kg term infant was delivered to a 28-year-old gravida 2 para 1 diabetic. Late deceleration on fetal monitoring was noted during labor. The infant was delivered vaginally severely asphyxiated with Apgar scores of 1 and 3 at one and five minutes respectively. Resuscitation efforts included tracheal intubation, bagging with oxygen and the administration of sodium bicarbonate, epinephrine, Plasmanate and the transfusion of 10 ml of blood which was drawn from the placenta. Transillumination demonstrated a right pneumothorax. A chest tube with underwater drain was inserted. The infant's condition stabilized and he was transferred to the neonatal intensive care unit where he continued to require mechanical ventilator support.

The infant was oliguric from birth in spite of 2 fluid challenges (20 ml per kg of Plasmanate) followed by furosemide (1 mg/kg). He subsequently developed marked edema. Fluids were restricted to insensible losses (30-40 ml per kg) plus urine output. Seizures were noted and phenobarbitone 20 mg/kg was necessary to control them. Hypoglycemia developed as a consequence of the fluid restriction and inability to deliver sufficient glucose. Hydrocortisone (5 mg/kg/dose) was administered every 12 hours. Electrolyte and mineral imbalance developed within 24 hours. (serum Na = 127 mEq/l, Cl = 81 mEq/l, K = 5.9 mEq/l and serum Ca = 5.4 mg/dl). The infant developed hypertension with a mean arterial pressure of 100 mm Hg. Hydralazine (0.5 mg/kg/d) was administered intravenously 4 hourly to maintain the pressure below 100 mm Hg.

Acute tubular necrosis was the presumptive diagnosis. Despite conservative management, the weight and edema continued to increase, hypoglycemia persisted despite the infusion of D25W and the use of steroids, and hyperkalemia increased progressively.

Dialysis was begun on day 7 of life. The previous day's controllable hyperkalemia, oliguria, hypertension, and edema were aggravated by appearance of florid congestive heart failure. A gallop was now audible and the liver span increased with 2½ cm palpable below the right costal margin.

A modified adult Trocath was inserted in the midline 2 cm above the umbilicus using standard technique (see Discussion). The middle lobe of the liver was not palpable in the midline. It was noted that the catheter advanced smoothly through the skin and abdominal wall without the usual sudden release of resistance as the catheter enters the peritoneal cavity. Initially the fluid was clear but 40 minutes later grossly bloody fluid appeared and worsened to cause clotting of the catheter. The catheter was removed and the infant was given transfusion support. The following day a single cuff neonatal Tenckhoff catheter was placed in the midline below the umbilicus under direct visualization and after removal of old blood from within the peritoneal cavity.

Cycles of Dianeal 137 with dextrose 4.25% and ½ unit peparin per ml were run every 50 minutes with 30 minutes dwell and 20 minutes drainage. Dextrostix did not climb above 130 ml/dl so cycles with 1.5% were not necessary.

Maneuvers to increase fluid extraction included increasing dwell time to 40 and 75 minutes and decreasing drain time to 10 minutes. Increasing cycle volume to 120 ml (30 ml/kg dry weight) improved fluid extraction but increase to 140 ml (35ml/kg dry weight) caused respiratory compromise (increased duskiness). Maximum fluid extraction (455 ml/day = 105 ml/kg/d) occurred only after institution of 6% dextrose dialysate alternating every other cycle with 4.25% (with 120 ml volume, 10 minutes to fill, 50 minutes to dwell and 10 minutes to drain = 70 minute cycles). Dextrostix ranged from 90 to 125 mg/dl. No insulin was required.

Fluid removal averaged 370 ml per day on this optimum cycle (Table 3). Weight fell from a high of 5.1 kg to 4.0 kg on day 17 of life. Mean arterial blood pressure fell to and remained at 72 mmHg over the first 9 days of dialysis.

Serum potassium fell to 3.4 mEq/l on the 3rd day of dialysis and KCl 3 mEq/l was added to the dialysate thereafter. From a high of 7.2 mg/dl the day prior to dialysis, the serum creatinine fell gradually to 1.9 mg/dl on the sixth day of dialysis. Blood pH, bicarbonate, and pCO_2 were unchanged by dialysis: pre 7.34, 25, 49 respectively, and after three days of dialysis 7.41, 21, 34 respectively.

The umbilical artery catheter was removed on day 10 of life. All spontaneous movement and seizures disappeared by day 13 of life and an EEG showed evidence of severe brain injury.

An inadvertent contamination of the closed dialysate system occurred on day 16 of life while the Tenckhoff was purposely temporarily disconnected. Following this the number of nucleated cells per mm^3 in the dialysate drainage climbed from 3 to 850. PMN's and bands increased from 27 to 84%. Gram stain showed gram negative bacilli. Appropriate antibiotics were instituted including gentamicin 4 mg per liter of dialysate given intraperitoneally. The patient died, apparently of overwhelming sepsis, on day 19 of life.

Postmortem examination revealed acute tubular necrosis of both kidneys, a large intraventricular hemorrhage and a thrombus in the aorta below the take-off of the renal arteries but also involving the right renal artery. There was massive hemorrhage of both adrenal glands. There was a healing through and through puncture wound of the lower edge of the middle lobe of the liver where the acute dialysis catheter had apparently penetrated.

Summary • Acute tubular necrosis was caused by severe perinatal asphyxia. Dialysis was initiated when conservative management of fluid overload, hypertension, hyperkalemia and hyponatremia was unsuccessful and when florid heart failure supervened. Fluid removal was successful in this patient. Serum sodium and potassium and blood pressure levels were corrected. Dialysis proceeded through a chronic dialysis catheter (Tenckhoff) for 11 days. Dialysis was complicated by puncture of the middle lobe of the liver with consequent hemorrhage requiring transfusion. In addition peritonitis occurred on the tenth day of dialysis. This apparently led to septicemia and death.

Discussion • Peritoneal dialysis of neonates and infants has been undertaken in several reported cases and for various indications. We have undertaken peritoneal dialysis on 11 neonates and infants under the age of one year. Several of the first neonates dialyzed died soon after initiation of dialysis because hypoxia and pulmonary edema had

progressed too far to be reversible by dialysis prior to demise. Pressure of fluid in the peritoneal cavity appeared to cause further respiratory compromise. From this it became clear that dialysis must be reserved for those patients who appear to have a reasonable chance of recovery and that dialysis can buy time for improvement to take place. Also we learned dialysis must be started early enough since it will take at least 1-2 hours before much result from the dialysis can be seen, although reversal of hyperkalemia may take only minutes. Dialysis is not a cure-all; its improvement of fluid, electrolyte, and pH imbalance are well recognized and are illustrated in all three patients. Secondary gains such as allowing administration of more glucose and hyperalimentation fluid in an anuric patient are becoming increasingly realized. In addition dialysis for metabolic defects is possible. However, "tuning a patient up" for some black-box benefit or attempting to correct disseminated intravascular coagulation (without eliminating the cause) are likely to add the risks of peritoneal dialysis (hemorrhage and infection) without securing any benefit.

The three cases described show that successful peritoneal dialysis is possible in a variety of settings in neonates. Case 1 describes a small 25 week gestation infant. Likewise case 2 describes a premature baby but of large size and with a severe PDA. Case 3 describes a large term infant with severe perinatal asphyxia.

Renal failure may be prerenal, renal or postrenal. Postrenal failure in the neonatal period occurs only if there has been obstruction to urinary flow from both kidneys (as with posterior urethral valves) or obstruction of a solitary kidney (as at the ureteropelvic junction). These conditions rarely require peritoneal dialysis in the neonatal period because severely affected patients usually have Potter's syndrome and associated hypoplastic lungs leading to death from hypoxia.

Prerenal failure occurs following hypoperfusion of the kidneys. This is seen with hemorrhage, shock, sepsis dehydration, and congestive heart failure. It is the commonest cause of renal failure in the neonate. If fluid is replaced and blood pressure restored promptly the renal failure is usually reversible. However, severe or prolonged renal hypoperfusion or hypoxia may lead to intrinsic renal failure.

Intrinsic renal failure is the most frequent cause of renal failure requiring peritoneal dialysis in the neonate. Perinatal asphyxia with hypotension occurs in almost 100% of reported cases (seen in all 3 cases reported here). Hypoxic-ischemic episodes due to hemorrhage, respiratory distress, cardiac failure, dehydration, and sepsis will aggravate the condition. Theories of the pathogenetic mechanisms for acute renal failure include a lowered glomerular permeability, tubular obstruction and afferent or efferent renal arteriolar changes.

In differentiating between prerenal and intrinsic renal failure in an oliguric patient who has not received diuretic therapy, the fractional excretion of sodium (FENa) or the renal failure index (RFI) has been the most reliable. RFI = urine sodium divided by the quotient of a spot urine creatinine divided by serum creatinine = Una ÷ (U/S Cr). Results of this calculation greater than 2.5 indicate intrinsic renal failure.

FENa = (U/S Na) ÷ (U/S Cr) × 100%. Results greater than 2.5% indicate intrinsic renal failure. FENa below 2.5% indicates prerenal oliguria such as is seen in dehydration.

All three cases reported had intrinsic renal failure as defined by these two indices (Table 1). It was feared patient 2 had cortical necrosis or renal vein thrombosis because of the gross hematuria and clots in the urine. However the lesion was reversible.

Catheter malfunction is not an uncommon problem. Most often a "ball valve" effect is present when fluid infuses readily but little or no effluent drains (patient 2). Most often this is caused by the catheter tip resting high in the abdomen and being wrapped by omentum. Various maneuvers (enema, flushing the catheter, attempting to thread a Fogarty catheter down past the obstruction) are rarely effective and may only cause peritonitis. Repositioning the patient is occasionally helpful. Most often the catheter needs repositioning (merely by pulling it out or pushing it in 1-2 cm) or it may need removal and replacement by a new catheter (patient 2) (in a new location on the abdominal wall to avoid introducing peritonitis).

Since catheter placement below the umbilicus with upward slope often leads to catheter malfunction (case 2) we prefer a supraumbilical site but to avoid puncture of the middle lobe of the liver, (patient 3) we insert the catheter about 1 cm above the umbilicus or use a shortened catheter with caudad slope below the umbilicus.

Suturing of the stiff acute catheter in place is not routine. A bridge of tape (as is often used to secure umbilical catheters in place) is usually adequate. Since a lancet is used only to penetrate the skin, leakage of dialysate out around the catheter is rare. If such leakage occurs (patient 2), a 4-0 silk purse-string suture is placed around the catheter exit site to hold tissue firmly up against the catheter.

If time allows, placement of a flexible Tenckhoff catheter under direct vision, including certainty that the tip lies in one of the pelvic gutters, is preferable to placement of a rigid modified acute dialysis catheter as previously described. The main advantages of direct visual placement are avoidance of

inadvertent bleeding (case 3) or introduction of an organism resulting in peritonitis (probably the cause in case 2) that may occur more easily with a stiff catheter. Since the Tenckhoff is able to be used chronically (patient 3) the appropriateness of long-term dialysis of the neonate should be considered prior to placement of a Tenckhoff.

Indications for initiating dialysis are the same as those used in older children. Usually elevated BUN and creatinine or anuria alone are not sufficient reason. The most common indication for dialysis in neonates with renal failure is fluid overload (patients 2 and 3). Volume and sodium overload occur frequently as a consequence of fluid infusion to keep serum glucose levels up, sodium bicarbonate administration, or potassium-sodium exchange resin use (Kayexalate^{R}). Hyponatremia (patients 2 and 3) or hypernatremia (patient 1) indicates imbalance between sodium and water homeostasis and are often an indication for dialysis.

Uncontrollable hyperkalemia is second only to volume overload as an indication for dialysis in neonates. Hemolysis, acidosis and catabolism as well as sepsis and hypoxia in the face of renal failure are the causes of the all too common problem (cases 1 and 2).

Metabolic acidosis and hypocalemia may be relative indications for dialysis but rarely without other indications.

Two factors indirectly related to the effects of dialysis may be important in determining whether dialysis should be initiated. Worsening respiratory status secondary to massive ascites pressing upward on the diaphragm may be reversed by draining the fluid off during dialysis and using small dialysate exchange volumes.

A second indirect factor deals with fluid extraction during dialysis. If fluid restriction leads to hypoglycemia or several days without nutrition, dialysis may need to be initated to allow for administration of glucose containing solutions including hyperalimentation or transfusions of red blood cells or fresh frozen plasma.

Nonrenal indications for peritoneal dialysis are rare in neonates. Exogenous toxins such as aminoglycosides are dialyzable but digoxin, penicillins and vancomycin, for example, are not. Endogenous toxins (such as glycine) are dialyzable but do not aid the underlying metabolic problem. On the other hand, hyperammonemic coma as seen in infants with urea cycle defects is treated effectively with peritoneal (or hemo-) dialysis. Seizures (cases 1 and 3) may occur as a result of hypoxia, electrolyte imbalance, intraventricular hemorrhage or hypoglycemia. As the long-term effects of these abnormalities on brain function and development are unknown, dialysis should be started sooner rather than later if it is felt that dialysis-correctable factors are causing the seizures. Electrolyte abnormalities are readily correctable with peritoneal dialysis. Hypoglycemia can be corrected as well; increased glucose may be administered and there is some absorption of glucose from the dialysate (Table 3).

The problem of fluid removal in neonatal peritoneal dialysis is particularly difficult. Permeability of the peritoneal membrane is greater than in older children which promotes rapid absorption of the osmotic sugar before the latter is able to pull fluid into the peritoneal space. Optimum dwell time needs to be individualized to a period long enough to obtain fluid extraction but not so long that fluid is reabsorbed. Volume of dialysate infused can be increased to 40 ml/kg to allow more removal of fluid but, as in patient 1, the amount of dialysate infused often cannot be raised sufficiently because increased pressure on the diaphragm causes increased respiratory compromise.

Therefore volume and dwell time variation may be helpful but not sufficient in removing fluid from these patients. Increases in dialysate dextrose to as high as 6% may be of additional help in fluid removal (patient 3) (6% dextrose dialysate can be made by adding 3.5 ml of D50W to each 100 ml of 4.25% dialysate). Careful watch on serum glucose levels must be maintained. Insulin may be used to keep hyperglycemia under control.

Acute renal failure can cause hypocalcemia which may require administration of a calcium containing fluid by peripheral IV in addition to the calcium contained routinely in the dialysate. However supplemental calcium should not be administered if an apparently low calcium is correctable to normal by calculation when hypoalbuminemia is present. For example, the ionized calcium is probably normal in a patient with total calcium of 7.8 mg/dl but an albumin of 2.5 gm/dl. To correct the albumin to normal would take 2 gm/dl = 4.5 gm/dl. Adding this 2 to the calcium of 7.8 yields 9.8 mg/dl, a normal value.

We do not advocate use of prophylactic antibiotics in peritoneal dialysis. However many neonates are already on multiple antibiotics as a result of previous indications. Once the suspicion of peritonitis is present, early and adequate antibiotic coverage is a must. Peritonitis is diagnosed on the basis of the peritoneal fluid cell count and differential. For the latter a Cytospin is most accurate. If more than 100 nucleated cells per mm^3 are present and more than 50% of these cells are polymorpholeukocytes or bands, antibiotics should be initiated. A positive gram stain may be helpful in guiding selection of antibiotics but a negative gram stain does not indicate absence of peritonitis. One possible combination of antibiotics to cover the most common causes

of peritonitis (gram positive cocci) but also to cover for gram negative rods is cephalothin 150 mg/liter of dialysate given IP (intraperitoneally) along with gentamicin 4 mg/liter of dialysate IP. Intraperitoneal drugs are not necessary if appropriate systemic antibiotics are already being used.

Hyperkalemia is readily treated with peritoneal dialysis because of equilibration of serum potassium with potassium-free dialysate and improvement in metabolic acidosis as base in the dialysate is utilized to shift hydrogen ion out of the cells in exchange for entering potassium. After 24-48 hours of peritoneal dialysis serum potassium levels may become low. Hypokalemia can be avoided by adding 4 mEq per liter of KCl to the dialysate. Adding to the dialysate of KCl 20 or more mEq/l (as is often added to intravenous solution) will cause rapid and severe hyperkalemia because the patient's serum is equilibrating against an extremely hyperkalemic dialysate.

If anaerobic metabolism predominates because of hypoxia the infant will not be able to buffer by metabolizing the lactate in the standard dialysate. Bicarbonate containing dialysate can be formulated and used in such instances (Calcium must be administered by another route in such cases).

Serum sodium levels tend to equilibrate toward the dialysate sodium which is 132 mEq/l in standard dialysate. Therefore sodium can be either added to or removed from the patient (Table 3).

Conclusion • An aggressive approach to the management of acute renal failure in the neonate using peritoneal dialysis should be initiated early as it may take several hours before any improvement in fluid and/or electrolyte balance occurs. With increasing experience and the same attention to detail that has been applied to other complicated medical disorders of the ill premature infant, a similar improvement in outcome can be expected for infants with acute renal failure.

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Neonatal necrotizing enterocolitis: an overview

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Although necrotizing enterocolitis (NEC) was initially described in 1891, it was not recognized as an important clinical entity until 1964 when the classic features were identified by Berdon and associates.[1] Within 20 years, NEC has emerged as a leading cause of morbidity and mortality among premature infants. It is the most frequent condition requiring surgical intervention in the neonatal intensive care unit (NICU). In a survey[2] of 31 Level III nurseries in the United States and Canada, the average mortality was 29.7% with the death rate exceeding 50% in some centers. The very low birth weight infant is at greatest risk with poorer outcome in those patients with ascites and peritonitis.[3]

Epidemiology • At least 90% of cases involve low birth weight infants of less than 38 weeks gestational age.[2] The reported incidence among inborn babies is 3/1000 for infants greater than 2500 grams to 66/1000 for infants less than 1500 grams.[4] In a recent study,[5] only 7.3% of 123 infants with NEC were full-term births. The frequency of the disease varies significantly between centers with no apparent relationship to geography, season, race or sex.

Pathogenesis • In the fetus and neonate, hypoxemia and shock are believed to redistribute blood flow, increasing delivery to the heart and brain while decreasing mesenteric perfusion. This adaptatory mechanism is analagous to the diving reflex in the seal. Therefore, any event causing hypotension or volume depletion can deprive intestinal circulation and produce ischemic mucosal injury. Hypotension frequently follows rapid exchange transfusion and maternal bleeding from abruptio placenta and placenta previa. Similarly, hyperosmolar feedings can create significant "third-space losses" with transfer of fluid from the intravascular to the extravascular compartment.[2]

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Further hypoxemic injury to the compromised intestine may occur in infants exhibiting respiratory distress. In the neonate, other clinical situations associated with vascular compromise include polycythemia, cyanotic heart disease, hypothermia, sepsis, and disseminated intravascular coagulation (DIC).

In the earlier stages of the disease, surgical exploration often reveals segmental involvement of the terminal ileum, cecum and proximal colon. Initially, the arterial blood supply usually appears intact, with localized venous stasis and thrombosis limited to the surface of the involved bowel. In an experimental model (newborn piglet), Touloukian and associates[6] measured decreased intestinal mucosal flow during asphyxia and increased perfusion with vascular congestion upon recovery.

Clustering of cases with outbreaks of NEC and decreased incidence following strict infection control measures suggest an infectious etiology.[7,8] Single organisms have been isolated including Klebsiella, Pseudomonas, Clostridia, Salmonella, coliform bacteria, and viruses. According to Lawrence,[9] the microbiological environment within the NICU is grossly abnormal and encourages unphysiologic patterns of intestinal colonization, resulting in monocontamination by exotoxin-producing organisms. Intestinal mucosal permeability is increased, permitting absorption of toxic macromolecules into the gut wall and ischemic necrosis. Analysis of intramural gas (pneumatosis intestinalis) reveals a mixture of 30% hydrogen which can only be produced by bacterial fermentation.[10]

Although the exact cause remains speculative, its onset clearly parallels the initiation of enteral alimentation with only 2-3% of cases developing in unfed infants. In the premature infant who is fed early, NEC often appears in the first ten days and usually within 72 hours. With prolonged withholding of feedings in the very low birth weight infant (<1000 grams), the presentation may be as late as ten weeks.[11-13] Inappropriate feeding may cause intestinal distension, disrupt peristalsis, and lead to stasis and bacterial overgrowth. Tube feedings, especially by the transpyloric route, encourage over-feeding and tend to modify peristalsis, pancreatic secretions and intestinal flora. In summary, the etiology of NEC involves multiple factors, including hypoxemia, hypotension, bacterial overgrowth and intestinal distention. Further investigation is necessary to clarify the extent to which each of these factors influences the development of NEC.

Clinical findings • Reviewing their nine-year experience with NEC, Kleigman and associates[5] were unable to document clinical signs in 11.4% of cases. However, specific risk signs are clearly identifiable in the majority of infants (Table 1). Poor feeding with increasing gastric residuals, vomiting, and abdominal distension and ileus may be early indicators of NEC. Blood (by guaiac testing) in the gastric aspirate or stool, loose stools in term infants, temperature instability, lethargy, apnea, bradycardia, and pallor with poor peripheral perfusion are common. Abdominal findings range from local tenderness to evidence of generalized peritonitis with distension, muscle guarding with rigidity, and erythema and edema of the abdominal wall. Studies may reflect hyponatremia, hyperbilirubinemia, persistent metabolic acidosis, and progressive thrombocytopenia, potentially resulting in a consumptive coagulopathy (DIC) and generalized bleeding.

Table 1. — Clinical Signs

Poor feeding	Temperature instability
↑Gastric residuals	Lethargy
Vomiting	Apnea - bradycardia
Abdominal distension - ileus	Metabolic Acidosis
Guaiac "+" stools	DIC - generalized bleeding
Diarrhea - loose stools	Thrombocytopenia
Peritoneal signs	Jaundice

Occasionally, the onset may be that of fulminant sepsis progressing rapidly to profound hypotension with DIC and cardiovascular instability. Bacteremia in this setting carries a dismal prognosis. More frequently an epidemic pattern is seen, with development of gastrointestinal symptoms in several infants within the NICU.

Radiologic abnormalities • An ileus pattern with nonspecific dilatation of bowel and absence of rectal gas is the earliest roentgenographic evidence of NEC (Table 2). A persistent, fixed, dilated loop of intestine on plain abdominal x-ray may also indicate involvement. The radiologic hallmark of NEC is the appearance of pneumatosis intestinalis, which may progress to portal venous gas (Figs. 1 and 2). Intramural gas can be absent in nearly 14% of cases.[14] Pneumoperitoneum (Fig. 3) usually indicates perforation, but must be clinically differentiated from a transdiaphragmatic migration of air which may occur as a consequence of pneumomediastinum in a ventilator-dependent baby. Increasing peritoneal fluid, especially with disappearance of intestinal gas, is a sign of perforation.[15]

Table 2. — Radiographic Signs of NEC

Nonspecific dilated loops of bowel
Persistent, dilated, fixed loop of bowel
Pneumatosis intestinalis
Portal venous gas
Pneumoperitoneum
Ascites





Figs. 1. & 2. — Plain abdominal x-rays demonstrate extensive pneumatosis intestinalis and portal venous gas, as fulminant NEC developed within eight hours of appearance.



Fig. 3. — A left lateral decubitus view reveals pneumoperitoneum with free air above the liver.

Medical management • It is essential that appropriate medical management be initiated at the earliest clinical suspicion of NEC even when radiographic confirmation is absent. Enteral feedings are immediately discontinued for 10-14 days. The stomach is lavaged of milk curds and gastic decompression is achieved with an indwelling tube of adequate size; a 10-12 French orogastric tube connected to gentle suction is recommended. It is important to maintain patency of the tube to prevent intestinal distention and resultant diminished blood flow.

Vascular reexpansion with fresh frozen plasma or blood is begun with evidence of hypotension and impaired tissue perfusion. Having achieved adequate fluid and electrolyte resuscitation, total parenteral nutrition is begun to provide protein and caloric support for the remainder of the course (2-3 weeks). Systemic antibiotics effective against enteric and indigenous flora are started after obtaining cultures of blood, cerebrospinal fluid, urine and stools. Penicillin and an aminoglycoside are initial choices, which can be altered according to sensitivity studies. Radiographic monitoring should include serial roentgenogram every 6-8 hours to document perforation

or progression of disease. Hematocrit, platelet count, acid-base status; coagulation profile, and electrolyte balance are closely monitored. Abdominal girth is measured and the abdomen clinically reevaluated at frequent intervals. The widespread prophylactic use of oral aminoglycosides is not recommended due to the possible emergence of resistant strains. In selected high risk, very low birth weight infants with a history of perinatal asphyxia and who have received hyperosmolar feedings, prior administration of an oral aminoglycoside may decrease the incidence of NEC.[16]

Surgical management • Despite early intervention and aggressive medical management, clinical progression of NEC to transmural necrosis with subsequent intestinal perforation may ensue. This can present as a perforation with pneumoperitoneum or as a contained leak with a palpable, tender mass or phlegmon. In both instances, there is evidence of peritonitis with erythema and edema of the adjacent abdominal wall. Exploration may be required prior to intestinal perforation because of clinical deterioration from overwhelming sepsis, not infrequently associated with DIC and thrombocytopenia.

Perforation may occur in an infant previously identified with pneumatosis intestinalis despite careful vigil and appropriate medical management. Alternately NEC can present with extensive bowel necrosis developing over 12-24 hours without previous documentation of intramural or portal venous air. Radiographic demonstration of pneumoperitoneum may be lacking due to effective nasogastric decompression or a contained, seal-off leak.

Ideally, laparotomy should be performed for gangrenous bowel before necrosis has proceeded to perforation. Advocates of "early operation", prior to perforation or clinical deterioration, often encounter bowel of questionable viability. Extensive resection of intestine and removal of potentially salvageable bowel can result in a "short-gut syndrome." However, one must avoid delay in laparotomy in the infant with gangrene and impending perforation. Kosloske advocates paracentesis in the presence of free peritoneal fluid or peritoneal lavage with analysis of the effluent as a guide to surgical intervention.[17] The need for exploration is established by a brown color or identifiable bowel contents in the peritoneal fluid or a gram stain revealing enteric bacteria. This invasive diagnostic approach has considerable merit but must be used cautiously to avoid perforation or laceration of the distended gut.

Once the decision to operate has been made, (Table 3) the infant should be resuscitated expeditiously with administration of broad-spectrum antibiotics and transfusion with plasma and/or blood. Transportation of the ill neonate from the environment of the NICU to the operating room is not without risk and special attention is necessary to prevent dislodgement of endotracheal tubes, hypothermia, and loss of venous access catheters. Continuous cardiac monitoring and maintenance of core temperature during transport are essential.

At laparotomy, the most common areas involved are the terminal ileum/right colon and the descending/sigmoid colon. All too frequently, however, the surgeon encounters extensive intestinal involvement which may include the duodenum and stomach. All grossly necrotic and nonviable bowel is excised and the proximal gut is exteriorized as an enterostomy (ileostomy or colostomy).[18] Intestine of uncertain viability can be reevaluated in 12-24 hours at a "second look" procedure. Occasionally a localized, isolated perforation with minimal peritoneal contamination is discovered and is managed preferentially by resection and creation of a proximal enterostomy. Primary anastomosis is rarely indicated since the ischemic process may extend, resulting in an anastomotic leak.

In a small select group of very low birth weight infants, transabdominal drainage of the soiled peritoneal cavity may be a temporizing measure which permits stabilization, followed promptly be definitive operation.[19]

Immediate postoperative care is primarily directed toward control of sepsis, vascular expansion, and nutritional support via intravenous hyperalimentation. After a period of 10-14 days, enteral feedings are resumed cautiously with hypoosmolar, low-curd formulas while carefully observing the infant for evidence of recurrent disease.[20] Before reestablishment for intestinal continuity, a contrast study of the defunctionalized distal bowel is mandatory to detect occult strictures (Fig.4).

Although medical management may be initially successful in some patients, late intestinal obstruction from stricture formation can ensue.[21,22] The obstruction may be partial or complete and may present weeks to months after the initial episode as alternating diarrhea/constipation, distension, vomiting, and failure to thrive. With increased awareness of necrotizing enterocolitis, early medical intervention, and sensible feeding regimens, an increasing number of tiny premature infants will escape this syndrome which has reached epidemic proportions in many neonatal centers.

Table 3. — Indications for Laparotomy

Pneumoperitoneum
Positive paracentesis
Fixed abdominal mass
Abdominal wall cellulitis
Clinical deterioration



Fig. 4. — A stenotic segment in the sigmoid colon as seen on barium enema, performed prior to closure of ileostomy.

Summary • Necrotizing enterocolitis is the leading condition requiring surgical treatment in the neonate. Very low birth weight infants are at greatest risk. Intestinal ischemia results in partial to extensive transmural necrosis. Although no single cause has been identified, specific risk factors and clinical signs of perforation are well recognized. At operation all grossly necrotic bowel is resected and the proximal bowel exteriorized. Postoperative attention is directed toward control of sepsis and nutritional support. Laparotomy may be required for late stricture formation following initially successful medical management.

References

1. Berdon, W.E., Grossman, H., Baker, D.H., Mizrahi, A., Barlow, O., and Blanc, W.A.: Necrotizing Enterocolitis in Premature Infant, Radiology 83:879, 1964.
2. Brown, E.G. and Sweet, A.Y.: Neonatal Necrotizing Enterocolitis, Pediatr. Clin. North Am. 29:1149, 1982.
3. Kliegman, R.M. and Fanaroff, A.A.: Neonatal Necrotizing Enterocolitis: A Nine-Year Experience Outcome Assessment, Am. J. Dis. Child. 135:608, 1981.
4. Stoll, B.J., Kanto, W.P. Jr., Glass, R.I., Nahmias, A.J., and Brann, A.W. Jr.: Epidemiology of Necrotizing Enterocolitis: A Case Control Study, J. Pediatr. 96:447, 1980.
5. Kliegman, R.M. and Fanaroff, A.A.: Neonatal Necrotizing Enterocolitis: A Nine-Year Experience Epidemiology and Uncommon Observations, Am. J. Dis. Child. 134:603, 1981.
6. Touloukian, R.J., Posch, J.N., and Spencer, R.: Pathogenesis of Ischemic Gastroenterocolitis of Neonate: Selective Gut Mucosal Ischemia in Asphyxiated Neonatal Piglets, J. Pediatr. Surg. 7:194, 1972.
7. Kosloske, A.M. and Ulrich, J.A.: Bacteriologic Basis for Clinical Presentations of Necrotizing Enterocolitis, J. Pediatr. Surg. 15:558, 1980.
8. Bell, M.J., Shackelford, P., Feigin, R.D., Ternberg, J.L., and Brotherton, T.: Epidemiologic and Bacteriologic Evaluation of Neonatal Necrotizing Enterocolitis, J. Pediatr. Surg. 14:1, 1979.
9. Lawrence, G., Bates, J., and Gaul, A.: Pathogenesis of Neonatal Necrotizing Enterocolitis, Lancet 1:137 (Jan. 16), 1982.
10. Kleigman, R.M.: Neonatal Necrotizing Enterocolitis. Implications for Infectious Disease, Pediatr. Clin. North Am. 26:327, 1979.
11. Wilson, R., Kanto, W.P. Jr., McCarthy, B.J., and Feldman, R.A.: Age at Onset of Necrotizing Enterocolitis: Risk Factors in Small Infants, Am. J. Dis. Child. 136:814, 1982.
12. Marchildon, M.B., Buck, B.E., and Abdenour, G.: Necrotizing Enterocolitis in Unfed Infant, J. Pediatr. Surg. 17:620, 1982.
13. Ramenofsky, M.L.: Necrotizing Enterocolitis Occurring in Infant Three Months of Age, J. Pediatr. Surg. 12:597, 1977.
14. Kliegman, R.M. and Fanaroff, A.A.: Neonatal Necrotizing Enterocolitis in Abscence of Pneumatosis Intestinalis, Am. J. Dis. Child. 136:618, 1982.
15. Leonidas, J.C., Krasna, I.H., Fox, H.A., and Broder, M.S.: Peritoneal Fluid in Necrotizing Enterocolitis. Radiologic Sign of Clinical Deterioration, J. Pediatr. 82:672, 1973.
16. Egan, E.A., Mantilla, G., Nelson, R.M., and Eitzman, D.V.: Prospective Controlled Trial of Oral Kanamycin in Prevention of Neonatal Necrotizing Enterocolitis, J. Pediatr. 89:467, 1976.
17. Kosloske, A.M. and Lilly, J.R.: Paracentesis and Lavage for Diagnosis of Intestinal Gangrene in Neonatal Necrotizing Enterocolitis, J. Pediatr. Surg. 13:315, 1978.
18. Martin, L.W. and Neblett, W.W.: Early Operation with Intestinal Diversion for Necrotizing Enterocolitis, J. Pediatr. Surg. 16:252, 1981.
19. Janik, J.S. and Ein, S.H.: Peritoneal Drainage Under Local Anesthesia for Necrotizing Enterocolitis (NEC) Perforation: A Second Look, J. Pediatr. Surg. 15:565, 1980.
20. Willis, D.M., Chabot, J., Radde, I.C., and Chance, G.W.: Unsuspected Hyperosmolality of Oral Solutions Contributing to Necrotizing Enterocolitis in Very-Low-Birth-Weight Infants, Pediatrics 60:535, 1977.
21. Janik, J.S., Ein, S.H., and Mancer, K.: Intestinal Stricture after Necrotizing Enterocolitis, J. Pediatr. Surg. 16:438, 1981.
22. Schwartz, M.Z., Richardson, C.J., Hayden, C.K., and Swischuk, L.E.: Intestinal Stenosis Following Successful Medical Management of Necrotizing Enterocolitis, J. Pediatr. Surg. 15:890, 1980.

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Use of ultrasound in diagnosis and management of periventricular - intraventricular hemorrhage in the preterm infant

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ABSTRACT: Periventricular-intraventricular hemorrhage (PIVH) is common in the preterm infant and is the most important complication affecting the neurologic outcome. Pathogenesis is imperfectly understood and multiple factors are involved. The presentation may be marked by a catastrophic clinical deterioration but more often has a subtle or stuttering presentation or may be clinically silent. Real-time ultrasound is the best procedure for diagnosing the hemorrhage and assessing its complications. The outcome generally relates to severity of the PIVH. Diligent supportive care and maintenance of cerebral perfusion pressure is important in early management. Follow-up with serial ultrasound examinations is important to identify progressive hydrocephalus.

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Improvement in survival of the very low birth weight infant has occurred in the last decade. The risk for periventricular-intraventricular hemorrhage (PIVH) and its sequelae in infants weighing less than 1500 grams or less than 32 weeks gestation is 35 to 45 percent.[1,2] Thus, PIVH is the most important determinant of neurologic morbidity in premature infants.

We review the pathogenesis, clinical features, diagnosis and management of PIVH and its complications.

Pathogenesis • The pathogenesis of PIVH is not completely understood and multiple factors play a role. The most consistent factor is prematurity; the incidence of PIVH increases with decreasing gestational age. The subependymal germinal matrix in these infants is an extremely vascular region and the vessels are tortuous, fragile, and have little supportive connective tissue. These vessels are readily injured by hypoxic insults and hemodynamic events.[3,4] Rapid increases in arterial blood pressure may be important in the development of PIVH.[5,7] Other factors that may play a role include perinatal asphyxia,[8] the development of a pneumothorax,[9] hypercapnia,[10] severe respiratory distress syndrome,[2] and rapid infusion of colloid or hyperosmolar solutions.[11]

Evaluation • Clinically two syndromes may be recognized.[12] One occurs in infants who have a large PIVH and presents as catastrophic deterioration. The second occurs with a smaller hemorrhage and presents as stuttering deterioration. Clinical signs of PIVH may be subtle and 50% of cases may not be suspected of clinical criteria.[13] Signs of PIVH include: bulging fontanel, falling hematocrit, hypotension, apnea, bradycardia, temperature instability, metabolic acidosis, abnormalities of glucose and water homeostasis, hypotonia, decreased activity and seizures.

Ultrasound evaluation • High resolution real-time ultrasound (US) has become indispensable in the diagnosis, follow-up and management of PIVH in the neonate.[14–21] Newborns are ideally suited for US since bone impedes the US signal, the anterior fontanel and thin calvarium of the neonate provide excellent "windows" through which to examine the neonatal brain.

US is a type of sonar system. High frequency sound waves, far above the human hearing range, are sent into the body. They then strike various interfaces in the body and are reflected back to the transducer, which also acts as a receiver. No ionizing radiation is involved. As yet, no harmful effects have been attributed to ultrasound.[21]

It is essential that the transducer be in contact with the anterior fontanel. Since air markedly attenuates sound waves, an aqueous gel is applied to the anterior fontanel to provide an air-free seal between the skin and the transducer. This gel is available in sterile packets* to help with infection control.

While CT is an excellent means of examining the neonatal brain,[22] US has several advantages. It is portable. Often babies with PIVH are too unstable to be transported to the CT scanner. The US machine can be easily wheeled into the neonatal intensive care unit and the examination performed without removing the infant from the isolette (Fig. 1).

US offers the ability to visualize the brain in real time. This is analogous to fluoroscoping with sound. The presence or absence of vascular pulsations can be readily determined thus providing some information regarding blood flow.

Early hydrocephalus can be detected more easily by US than by CT and intraventricular thrombi that may be isodense on CT are readily visualized by US. US can view the anatomy in coronal, sagittal, and transaxial planes. The lack of ionizing radiation and the fact that an US examination should be considerably less expensive than a CT study are other advantages.



Fig. 1a. — Sonographer scanning neonate in isolette in neonate intensive unit.



Fig. 1b. — Transolucer (arrow) must be in contact with patient's head.

Disadvantages include: the quality of the US examination is operator dependent, and CT can demonstrate subarachnoid and subdural hemorrhages more readily.

Scanning through the anterior fontanel, the germinal matrix, head of the caudate nucleus region, and the ventricular system can be readily visualized (Fig. 2). Hemorrhages appear as areas of bright echoes. Burstein et al[22] have proposed the following classification for PIVH:

Grade I — isolated hemorrhage into one or both of the germinal matrices (Fig. 3).

Grade II — germinal matrix hemorrhage with extension into normal sized ventricles.

Grade III — germinal matrix hemorrhage with extension into dilated ventricles.

Grade IV — Grade III plus extension of hemorrhage into adjacent brain parenchyma (Fig.4).

While there are some limitations to this system, and a more precise description of the location and size of a hemorrhage is often important for an individual case, this grading system is useful in communication between physicians and appears to have a relationship to the long-term outcome of the patient.

US should be used for follow-up examinations on these infants. Resolution of hemorrhage (Fig. 5) or development of hydrocephalus (Fig. 6) or areas of porencephaly can be detected.

Management and outcome • Neurologic injury in PIVH may occur as a result of several factors: (1) the preceding hypoxic ischemic insult; (2) the decreased cerebral perfusion that may occur with intracranial hypertension; (3) destruction of white matter from intracerebral extension of blood and (4) posthemorrhagic hydrocephalus.[23] In general, infants with mild

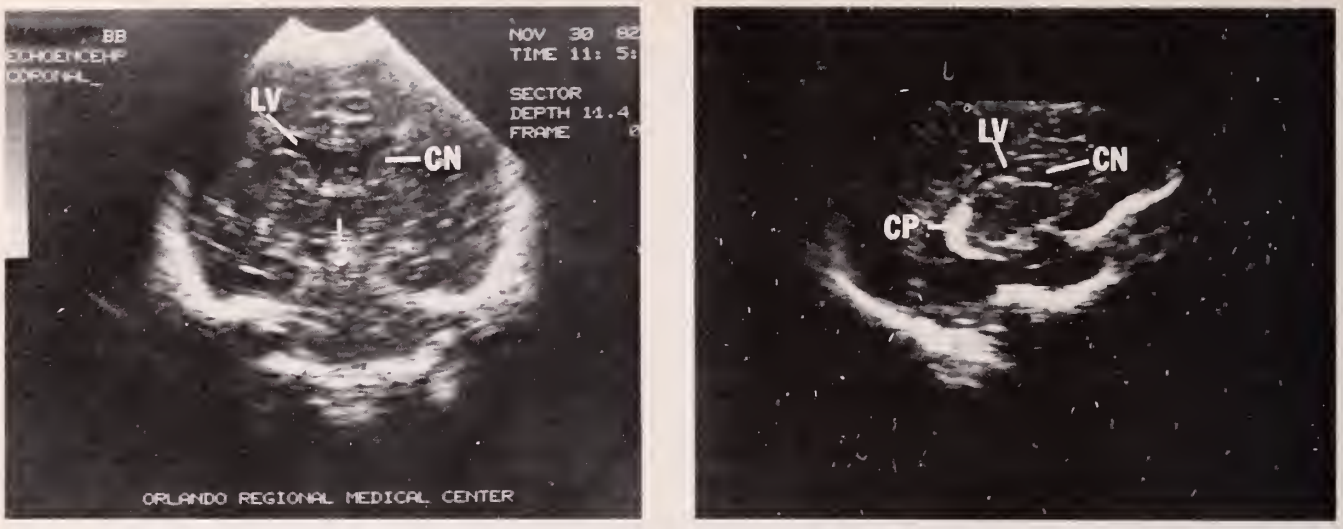


Fig. 2. — A: Coronal veiw through anterior fontanel. B: Sagittal view through anterior fontanel. LV=lateral ventricle; 3=third ventricle; CN=candate nucleus; CP=choroid plexux.

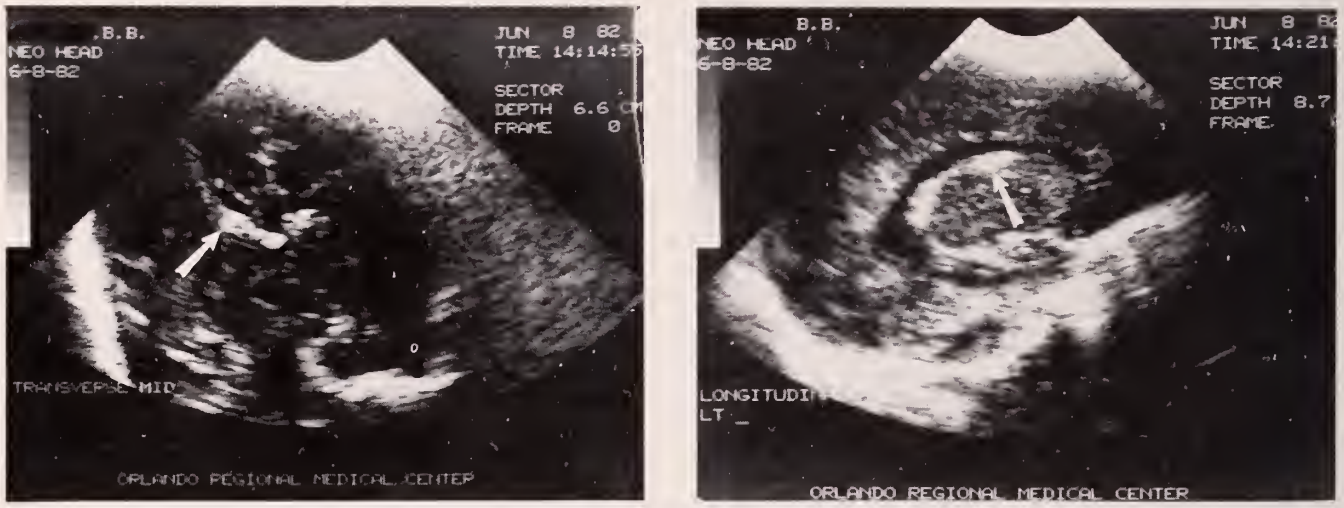


Fig. 3. — Grade I hemorrhage. (A) Coronal and (B) sagittal views have arrow pointing to small subendymal hemorrhage. On sagittal view note how normal echogenic choroid plexus tapers anteriorly and hemorrhage appears as an echogenic collection further anteriorly.

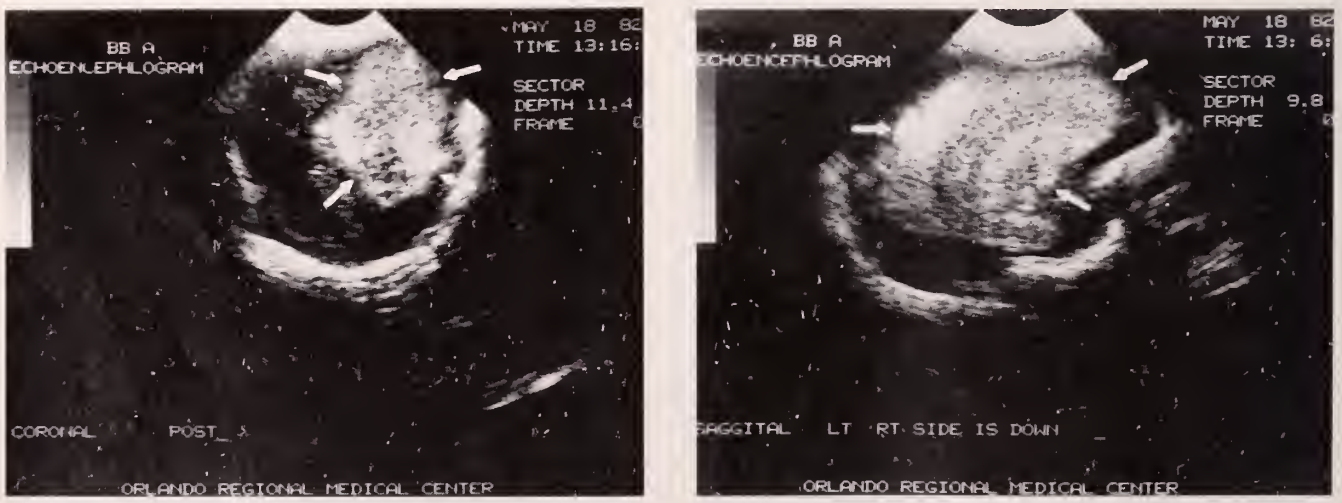


Fig. 4. — Grade IV hemorrhage. (A) Coronal and (B) sagittal views have arrows bounding a large hemorrhage involving the entire left parietal region.

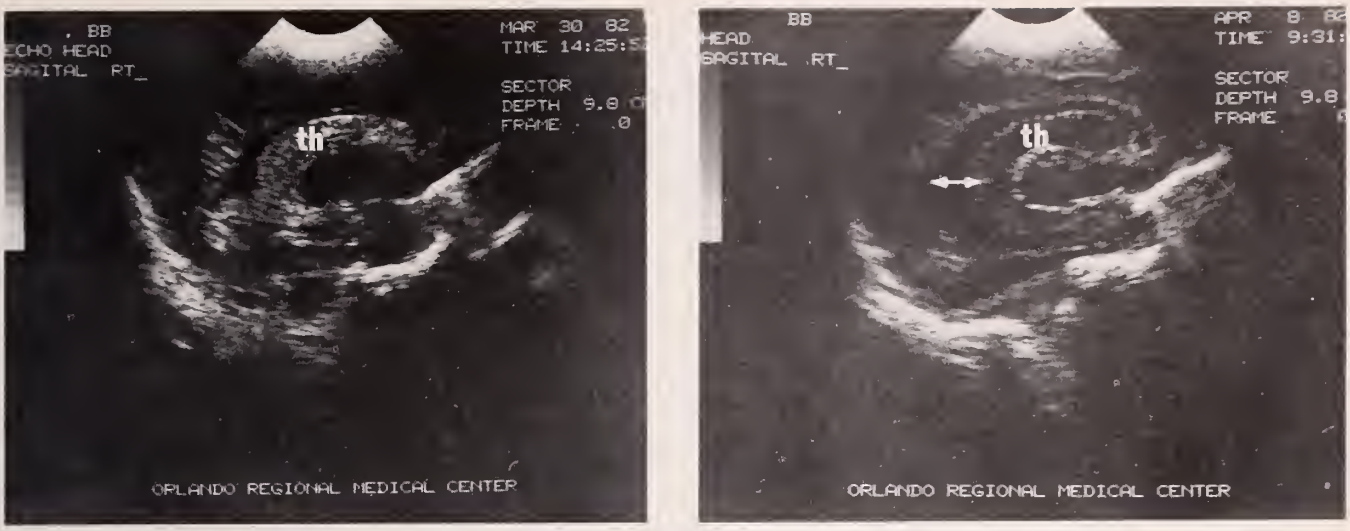


Fig. 5. — Resolving hemorrhage. (A) Sagittal view with thrombus (th) from Grade III hemorrhage filling most of dilated lateral ventricle, (B) nine days later thrombus has retracted away from wall of lateral ventricle (double-headed arrow). Also note decrease in echoes from inner structure of thrombus due to durther organization and liquifaction.

PIVH survive and are normal on relatively short-term follow-up.[2],[24] Infants with severe PIVH have a 50-65% mortality and only a minority are normal on short-term follow-up. Approximately 50% of these infants develop progressive hydrocephalus. The outcome for infants with moderate PIVH lies between these two extremes.[24]

Good supportive care, namely the diligent maintenance of temperature, oxygenation, ventilation and metabolic status is critical. Maintaining an optimal cerebral perfusion pressure is important. This requires maintenance of an adequate blood pressure. The cerebral circulation may be pressure-passive in the sick preterm infant and a too rapid increase in blood pressure may cause extension of the hemorrhage. Intracranial pressure, if elevated, should be lowered. This may be achieved by lumbar puncture. If this fails to relieve the pressure, ventricular taps or ventriculostomy and drainage may be necessary. Definitive therapy for hydrocephalus is the placement of a ventriculo-peritoneal shunt.

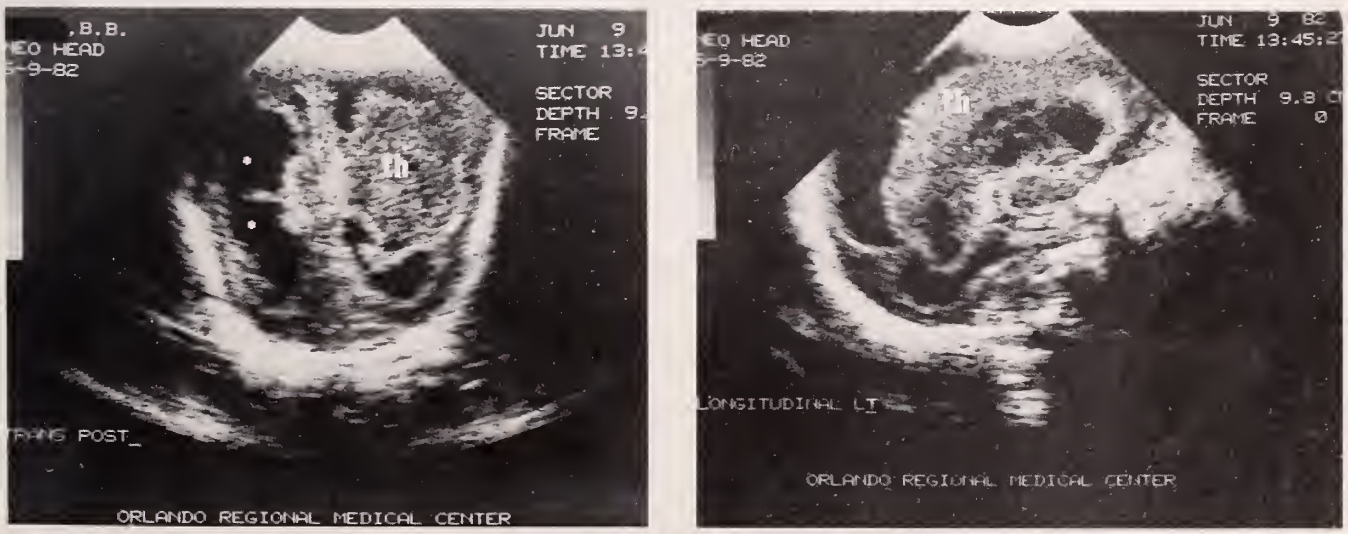


Fig. 6. — Same patient as Fig. 4 22 days later. (A) Coronal and (B) sagittal view reveal prominent hydrocephalus bilaterally. There is a large thrombus (th) in the left lateral ventrical and very little thrombus in the dilated right ventricle (*).

The results of serial lumbar punctures in preventing posthemorrhagic hydrocephalus are controversial and inconclusive.[25,26] It is important to follow these infants with serial US examinations or CT scans in order to detect progressive hydrocephalus.

In summary, PIVH is a major complication for infants born with a gestational age less than 32 weeks or a birth weight less than 1500 grams. Portable high resolution real-time ultrasound can be of value in the diagnosis, follow-up and management. If available, it should be the first study ordered by the neonatologist or pediatrician who suspects this condition.

References

1. Ahmann, P.A., Lazzara, A., and Dykes, F.D., et al: Intraventricular Hemorrhage in High-Risk Preterm Infant Incidence and Outcome. Ann. Neurol. 7:118, 1980.
2. Papile, L.A., Burstein, J., Burstein, R., and Koffler, H: Incidence and Evolution of Subependymal and Intraventricular Hemorrhage: Study of Infants with Birth Weights Less than 1500 Grams, J. Pediatr. 92:529, 1978.
3. Hambleton, G. and Wigglesworth, J.S.: Origin of Intraventricular Hemorrhage in Preterm Infant, Arch. Dis. Child. 51:651, 1976.
4. Wigglesworth, J.S. and Pape, K.E: Integrated Model for Hemorrhagic and Ischaemic Lesions in Newborn Brain, Early Hum. Dev. 2:179, 1978.
5. Dykes, F.D., Lazarra, A., and Ahmann, P.A., et al: Intraventricular Hemorrhage Prospective Evaluation of Etiopathogenesis, Pediatrics 66:42, 1982.
6. Fivimura, M., Salisbury, D.M., and Robinson, R.O., et al: Clinical Events Relating to Intraventricular Hemorrhage in Newborn, Arch. Dis. Child. 54:409, 1979.
7. Goddard, J., Lewis, R.M., and Armstrong, D.L., et al: Moderate Hemorrhage in Newborn Beagle Model, J. Pediatrics, 96:1057, 1980.
8. Lou, H.C., Lassen, N.A., and Friis-Hansen, B.: Impaired Autoregulation of Cerebral Blood Flow in Distressed Newborn Infant, J. Pediatrics 94:118, 1979.
9. Hill, A., Perlman, J.M., and Volpe, J.J. Relationship of Pneumothorax to Occurrence of Intraventricular Hemorrhage in Premature Newborn, Pediatrics 69:114, 1982.
10. Kenny, J.D., Garcia-Prats, J.A., and Hilliard, J.L., et al: Hypercarcia at Birth Possible Role in Pathogenesis of Intraventricular Hemorrhage, Pediatrics 62:465, 1978.
11. Simmons, M.A., Adcock, E.W., Bard, H., and Battaglia, F.C. Hypernatermia and Intracranial Hemorrhage in Neonates, New Engl. J. Med. 291:6, 1974.
12. Volpe, J.J. Neurology of Newborn, Philadelphia, W.B. Saunders Co., pp. 239-294, 1981.
13. Lazzara, A., Ahmann, P.A., and Dykes, F.D., et al. Clinical Predictability of Intraventricular Hemorrhage in Preterm Infants, Pediatrics 65:30, 1980.
14. Grant, E.G., Schellinger, D., Borts, F.T., McCullough, D.C., Friedman, G.R., Sivasubramanian, K.N., and Smith, Y. Real-time Sonography of Neonatal and Infant Head, AJR 136:265-270, 1981.
15. Edward, M.K., Brown, D.L., Muller, J., Grossman, C.B., and Chua, G.T. Cribside Neurosonography Real-time Sonography for Intracranial Investigation of the Neonate AJR 136:271-275, 1981.
16. Babcock, D.S. and Han, B.K. Accuracy of High Resolution Real-time Ultrasonography of Head in Infancy, Radiology 139:665-676, 1981.
17. Sauerbrei, E.E., Digney, M., Harrison, P.B., and Cooperberg, P.L. Ultrasonic Evaluation of Neonatal Intracranial Hemorrhage and Its Complications, Radiology 139:677-685, 1981.
18. Grant, E.G., Borts, F.T., Schellinger, D., McCullough, D.C. Sivasubramanian, K.N., and Smith, Y. Real-time Ultrasonography of Neonatal Intraventricular Hemorrhage and Comparison with Computed Tomography, Radiology 139:687-691, 1981.
19. Mack, L.A., Wright, K., Hirsch, J.H., Alvord, E.C., Guthrie, R.D., Shuman, W.P., Rogers, J.V. and Bolender, N.F., Intracranial Hemorrhage in Premature Infants. Accuracy of Sonographic Evaluations, AJR 137:245-250, 1981.
20. Slovis, T.L. and Kuhns, L.R. Real-time Sonography of Brain Through Anterior Fontanelle, AJR 136:277-286, 1981.
21. Stewart, H.F. and Stratmeyer, M.E. (eds): Overview of Ultrasound Theory, Measurement, Medical Applications, and Biological Effects, DHHS (FDA) 82-8190, July 1982.
22. Burstein, J., Papile, L. and Burstein, R. Intraventricular Hemorrhage and Hydrocephalus in Premature Newborns: Prospective Study with CT, AJR 132:631-635, 1979.
23. Tarby, T.J. and Volpe, J.J. Intraventricular Hemorrhage in Premature Infant, Pediatr. Clin. North Am. 29, 5:1077, 1982.
24. Krishamoorthy, K.S., Shannon, D.C., and DeLong, G.R., et al. Neurologic Sequelae in Survivors of Neonatal Intraventricular Hemorrhage, Pediatrics 64:233, 1979.
25. Mantovani, J.F. Pasternak, J.F., and Mathew, O., et al. Failure of Daily Lumbar Puncture to Prevent Hydrocephalus Following Intraventricular Hemorrhage, J. Pediatr. 97:278, 1980.
26. Papile, L.A., Burstein, J. and Burstein, R., et al: Posthemorrhagic Hydrocephalus in Low-Birth Weight Infants. Treatment by Serial Lumbar Punctures J. Pediatr. 97:273, 1980.

* Aquasonics, Parker Laboratories, Inc., Orange, New Jersey 07050.

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Impact of breast feeding — obviating problems

Lewis A. Barness, M.D.

ABSTRACT: Many new mothers have been convinced that breast feeding provides many advantages to the newborn. Just as mothers must re-learn the techniques of nursing, doctors must learn of the problems which may be encountered and their management.

Problems which can be managed simply, or with proper advice frequently avoided, include failure to thrive, breast engorgement, sore nipples, and mastitis. Simple corrective measures usually suffice to produce a happy mother-infant pair.

Paramount in managing successful nursing is the need for support from the father, the physician who is to deliver the baby, the physician who is to care for the baby, and the grandparents. Eventually nursing may be considered the usual form of nutriture and many present problems may disappear.

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One by-product of the neonatal-perinatal program in Florida has been a resurgence in breast feeding. The advantages of nursing of the newborn have been expressed frequently and include immunological, economical and psychological factors.[1] Special biochemical properties may have unequalled nutritional qualities. Recent data support the hypothesis that allergies in the newborn and older child are fewer in the breast fed than in the bottle-fed baby. In some areas of the world, breast feeding has been used as a method of birth control; this method has at best been indefinite and seems to be effective only when the mother is malnourished.

Pediatricians, obstetricians, other physicians and multiple lay groups have supported the return to nursing. A few questions concerning nursing problems have surfaced, mainly because whole generations of grandmothers have had no experience with nursing and are more often negativistic rather than supportive. Similarly, whole generations of physicians have had little experience with the ordinary little questions that occur with nursing and tend to revert to artificial feeding procedures with which they have been eminently successful.

Many of the more common problems can be avoided and are being avoided with the preparation now being offered to expectant parents before, during and after delivery.

Preparation • Both the father and mother are involved in the decision regarding mode of feeding of the infant usually within the first few months of the onset of pregnancy. The breasts are examined for lumps and, if found, evaluated. Nipples are examined for protractility and if inverted a milk cup is

recommended or the Hoffman technique is used to evert the nipple several times a day until the baby is born and can suck on the nipple.

Babies are now placed on the breast as soon as the mother is awake and comfortable after the delivery. The baby will have received eye and vitamin K prophylaxis but cleaning, except for large amounts of vernix, is postponed. With the mother in a position of comfort for her, the baby's body is rotated to the mother, the baby's and mother's eyes meet, and the mother guides the nipple to the baby's cheek.

For the first week the mother offers both breasts at each feeding. Feedings more often than every 2-3 hours may be counterproductive, but for the first several weeks the baby may not waken within four or five hours and should be offered feedings at intervals no longer than every five hours until a routine of about 3-5 hours is established.

Failure to thrive • It has been found that proper instruction at time of discharge helps babies start to gain weight within a week or ten days. A phone call from the physician several days after discharge is useful for answering questions.

Some have assumed that once a baby is nursing well at discharge, nursing will proceed well. While nursing is nature's way of nurturing the baby, the process is not innate. Nursing obviates many problems and an examination at about two weeks of age assures that the baby is eating well and is getting sufficient food and fluids. The baby thrives, bowel movements become regular though they may occur 4-6 times in one day or not more frequently than once a week, and the baby will urinate 4-8 times daily.

Engorgement • Sometimes mothers complain that their breasts are "too full." Engorgement occurs not only from accumulation of milk but also from increased vascularity of the breast. The mother who has engorged breasts complains that the baby does not "latch on" well to the breast and cannot eat. It is helpful to have the mother manually express a few drops of milk before nursing. Advising the mother to nurse more frequently is also effective in avoiding engorgement. Altering the mother's fluid intake, either by decreasing to avoid engorgement or increasing "to make more milk" is not effective and may make the mother unnecessarily uncomfortable. Some recommend moist heat over the engorged breast for 5-10 minutes before nursing.

Sore cracked nipples • Prevention of engorgement usually avoids sore nipples. Nursing more frequently, manually expressing a little milk, suggesting that the mother nurse in different positions, and keeping the breast dry between feedings may help. Plastic liners should be avoided in the brassiere. Emolient cream may be used but not often. The baby should not be allowed to sleep at the breast.

Mastitis • Mastitis is an infection which usually occurs after the breast has been engorged. Engorgement is treated and antibiotics which are safe for the baby are administered. The baby should nurse first from the less sore breast. The mother may require mild analgesics. If an abscess forms, the breast may be so sore that nursing on that side should be avoided for several days.

Drugs • Most drugs given to the mother appear in much smaller quantities in the milk but do not usually adversely affect the infant. Some drugs such as atropine, meprobamate, ergot and iodides can cause adverse effects and should be avoided during the period of lactation.

Summary • Recent improved perinatal care in Florida has included an increase in breast feeding. When most parents are told of the advantages, many elect to nurse. In addition to emotional support recognition that nursing is not automatic helps to make this mode of feeding not only successful but also enjoyable.

Reference

1. Goldfarb, J. and Tibbetts, E.: Breastfeeding Handbook. Enslow Publishers, Hillside, N.J., 1980.

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Florida Regional Perinatal Intensive Care Program developmental evaluation component - early developmental outcome

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ABSTRACT: The State of Florida Children's Medical Services contracted with the Department of Pediatrics, University of Florida College of Medicine, to develop an integrated, comprehensive, computerized data collection and monitoring system for the Regional Perinatal Intensive Care Centers Program. Neonatal, obstetrical, developmental and fiscal components are included in the online data base management system. The system resulted from the need to assess the impact of the Regional Perinatal Intensive Care Center program on the incidence of perinatal mortality and morbidity. The perinatal data base contains information on more than 30,000 patients served since 1977. Analysis of survival data from the neonatal data base indicates that (1) infants with birthweights 500-750 grams had 18% survival; (2) 751-1000 grams 50% survival; (3) 1001-1500 grams 83% survival, and (4) greater than 1501 grams 94% survival. These neonatal survival statistics are examples of quantified statewide data base management which allows clinicians and program management specialists to make decisions based on current normative information.

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In 1974 the Florida legislature established a Neonatal Intensive Care Program within Children's Medical Services to provide special care to premature and seriously ill infants. This program was expanded to a Regional Perinatal Intensive Care Program with addition of the obstetrical component in 1979. The developmental evaluation component was designed to evaluate the long-term consequences for these infants who are at high risk for developmental delay. A Developmental Evaluation Follow-up Center exists at each of Florida's nine Regional Perinatal Intensive Care Centers.

The major goals of this follow-up component are:

1. To measure the incidence of developmental morbidity among participants in the Regional Perinatal Intensive Care Program for the purpose of evaluating program efficacy, and
2. To facilitate normal development to the highest degree possible by providing follow-up care for infants treated in the Regional Perinatal Intensive Care Programs.

Prior to establishment of such perinatal programs, research reports indicated that up to 50% of survivors suffered from severe central nervous system impairment and developmental disabilities.[1-9] Since the early 1970's, with the increased availability of perinatal intensive care services, the incidence of developmental delay for low birthweight children has declined to less than 25%.[10-24]

The Florida Regional Perinatal Intensive Care Program is a unique statewide program which uses the developmental functioning of its survivors as one method of assessing its effectiveness. This paper presents an overview of the developmental evaluation component and reports on longitudinal developmental morbidity statistics obtained over the past six years.

Procedure • The developmental evaluation follow-up personnel include Children's Medical Services consultant pediatricians and/or psychologists with

special training in developmental evaluation of infants and children. An interdisciplinary, multiphasic approach characterizes the evaluation process which utilizes pediatricians, psychologists, and allied health professionals as service providers. Case management, referral, consultation, treatment, and/or intervention services are offered as needed. A developmental liaison is located in each Developmental Evaluation Center to coordinate scheduling, record keeping, case management, date entry, and referrals to other Children's Medical Services.

Each child is assessed on medical, neurological, and developmental examination at three and six months, and at one, two, three, and four years of age. These evaluations are administrated on an individual basis in order to assess physical and mental development. Current demographic data are obtained during each evaluation via a structured interview. Patient data at each follow-up visit (demographic, medical and developmental) are recorded on standardized Children's Medical Services reporting forms for entry into the Perinatal Data Management System or for private physicians. Patient data summaries are generated and statistical reports with individual patient data are sent to each regional perinatal center and to the Children's Medical Services Program office on a quarterly basis.

Developmental follow-up patient eligibility • Infants for the developmental evaluation follow-up program between 1976 and 1981 were selected according to the following criteria: (1) infants with birthweights less than 1500 gm, and (2) infants with birthweights greater than 1500 gm having hospital numbers ending in 0 or 5. During this time period, approximately 40% of the children served within the Regional Perinatal Intensive Care Program were eligible for follow-up services.

Since 1981 selection criteria were expanded to include:

1. All infants with birthweights less than or equal to 1500 gm.
2. All grant-eligible (Medicaid) infants.
3. Grant-sponsored (Children's Medical Services funded) infants.
4. All non grant-eligible infants with birthweights greater than 1500 gm whose hospital number ends in 5.

Place of residence or ability to pay are not used to determine eligibility. Infants treated in step-down units are intergrated into the developmental evaluation component as are infants served in the neonatal complex surgery program. Currently 84% of all children admitted to the Regional Neonatal Intensive Care Centers are eligible for developmental evaluation follow-up. All parents of eligible children are informed of the program prior to or upon discharge from the Neonatal Intensive Care Units.

Evaluation process • Medical history, general physical condition, neurological and developmental status are evaluated at each follow-up visit. Immunization status and any chronic or acute medical problems are assessed and documented. The pediatrician then rates the child's medical status as a "well child," "at risk" or as "certainly impaired."

The Bayley Scale of Infant Development is the formal developmental evaluation test utilized for all children ages six months to under three years of age. It provides a measure of an infant/toddler's mental, motor, and behavioral functioning. Test profiles are scored using adjusted chonological age (age of the child since birth minus the number of weeks premature). Children three years and above are assessed with the Stanford Binet Intelligence Test and are scored using chronological age. Test items measure early mental ability, memory, eye-hand coordination, personal-social skills, and language development. Both tests have a mean of 100 and a standard deviation of 16. A developmental delay is defined as a Mental Developmental Index equal to or less than 69 or an Intelligence Quotient equal to or less than 69 on the Stanford Binet. These scores reflect two standard deviations below the mean on either test. Scores below this level qualify a child for either Developmental Services or Special Education Services in Florida.

Analysis of data • The number of developmental evaluations has increased tenfold since inception of the developmental evaluation component of the Perinatal Intensive Care Program (Table 1). During this period 14,692 evaluations have been completed.

Demographic data for parents of the 5,239 infants participating in the Developmental Evaluation Follow-up Program are presented in Table 2. Fifty five percent had incomes below $8,000 which is considered below the poverty level for a family of four. Sixty two percent of the mothers were married and 41% were white.

Table 1. — Developmental Evaluations by Fiscal Year.

Fiscal Year	Number of Developmental Evaluations
1975-1976	325
1976-1977	1100
1977-1978	1677
1978-1979	2133
1979-1980	2466
1980-1981	2970
1981-1982	4021
1975-1982	14692

Fifty five percent of the children were males. Mean maternal education was 12 years. Thirty percent did not graduate from high school and 7% were college graduates. Mean maternal age was 25 years with 19% being teenagers and 20% between 30 and 39 years of age.

Most children have had multiple developmental evaluations over the past six years. For data analysis purposes, their most recent evaluation test score was used within a given age category. Evaluation data are reported on assessments at six months through four year of age.

The lowest percentage of developmental delay (Fig. 1) was 7% at six months of age. The greatest incidence of developmental delay (14%) occurred at two years of age. At three and four years of age the developmental delay percentage stabilized at 12%.

For the 5,239 children classified by birthweights (Fig. 2) and using each child's last developmental evaluation score, children with birthweights less than 1000 gm had a 21% incidence of developmental delay. The lowest incidence of developmental delay was in the birthweight group 1501 to 2500 gm. The less than 1500 gm birthweight infants (39% of infants tested) had approximately twice the incidence of developmental delay (15.4%) than those children with birthweights greater than 1500 gm (8.5%).

For the mean developmental scores of all children evaluated since inception of the program (Fig. 3), Bayley and Binet mean developmental scores were compared by birthweight categories and age at follow-up, utilizing each child's last evaluation on either measure. Children in the lowest birthweight category (500-1000 gm) had the lowest mean developmental index whether evaluated before or after two years of age. Mean developmental scores increased as birthweight increased.

Developmental delay comparisons by birthweight and evaluation age (Fig. 4) indicate that the lowest birthweight group, 500 to 1000 gm, had the highest incidence of developmental delay over the five evaluation ages. Children with birthweights between 1001 to 1500 gm had the second highest incidence of developmental delay. The birthweight group between 1501 and 2500 gm had the lowest incidence of developmental delay at all ages. Children with birthweights greater than 1500 gm have an overall delay rate of 6% under two years of age, which increased to 10% after three years of age. The children in these birthweight groups (greater than 1500 gm) account for 75% of admissions to the Neonatal Intensive Care units in Florida's Perinatal Program.

Table 2. — State of Florida Regional Perinatal Center, Parental Demographic Data for Developmental Follow-up Program, July 1, 1976 — December 31, 1982.

Income Level		Marital Status	
$ 0 - 4,000	34%	Married	62%
4,000 - 8,000	21%	Never Married	29%
8,000 - 12,000	19%	Divorced	5%
12,000 >	26%	Separated	4%
Ethnic Origin		**Sex of Child**	
White	41%	Male	55%
Black	52%	Female	45%
Hispanic	6%		
Other	1%		

Discussion • Preliminary analysis of developmental evaluation component data suggests a reduction in the percentage of developmental delay in premature and sick infants from the nine Regional Perinatal Centers in Florida compared to current follow-up studies.[25-33]

The incidence of significant developmental delay for less than 1500 gm birthweight infant on a statewide basis is 15.4% based on each child's last examination. The incidence of delay for the greater than 1500 gm infant (61% of those tested) is 8.5%. There is a paucity of current follow-up studies for this birthweight group so meaningful comparisons are difficult. The birthweight group 500 to 1000 gm is at the highest risk for developmental delay (21% incidence), a finding consistent with other published data.[24,25,27,29] This group poses problems for the providers of perinatal intensive care. Morbidity rates are less, even in the highest risk (lowest birthweight) groups.

A primary goal of the developmental evaluation component has been to document developmental morbidity in early childhood (up to age five). It would be of some interest to ascertain and document the developmental morbidity of these children as they progress through their public school eduation.

The Developmental Evaluation Follow-up Program also has served as an early identification, referral, treatment, consultation and continuing care system by triaging appropriate and necessary services for the 589 children identified as developmentally delayed in order to maximize each child's full developmental potential. Identification of significant developmental problems without adequate community resources for treatment poses a serious dilemma which is further complicated by the increasing number of children being served by the Program. The provision of developmental intervention for these high-risk infants who are identified with clear delays or who are at increased risk for delays must be addressed and the effectiveness of such services researched. It is also important to consider those children with borderline to low-normal developmental scores (70-89). Interventions to facilitate development and prevent further delays are needed.

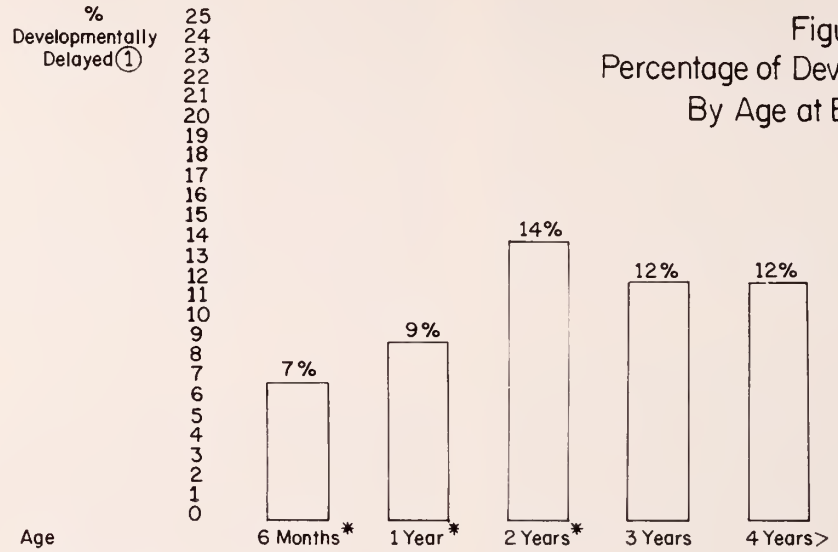


Figure 1
Percentage of Developmental Delay
By Age at Evaluation

Age	6 Months*	1 Year*	2 Years*	3 Years	4 Years>
Number of Children Evaluated	3026	2429	1541	974	989
Number Delayed	207	224	222	122	114

* = Adjusted Age
(1) = Developmental Score ≤ 69.

Fig. 1. — Percentage of developmental delay by age of evalutation.

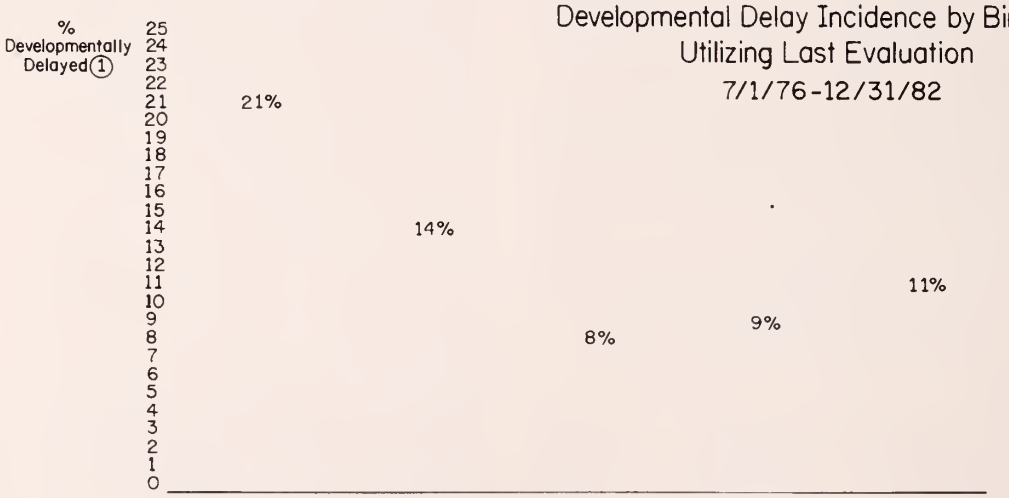
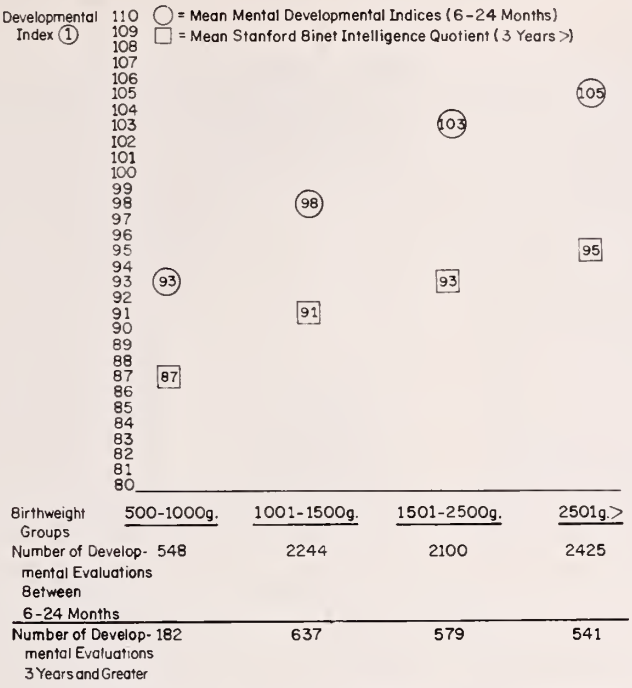


Figure 2
Developmental Delay Incidence by Birthweight
Utilizing Last Evaluation
7/1/76-12/31/82

Birthweight Groups	500-1000g.	1001-1500g.	1501-2500g.	2501g.>	500-2501g.>
Number of Children Evaluated 6months - 5 Years	390	1640	1619	1672	5239
Number of Children with a Developmental Delay	82	223	134	150	589

(1) = Developmental Score ≤ 69.

Fig. 2. — Developmental delay incidency by birthweight utilizing last evaluation, 7/1/76-12/31/82.



Birthweight Groups	500-1000g.	1001-1500g.	1501-2500g.	2501g.>
Number of Developmental Evaluations Between 6-24 Months	548	2244	2100	2425
Number of Developmental Evaluations 3 Years and Greater	182	637	579	541

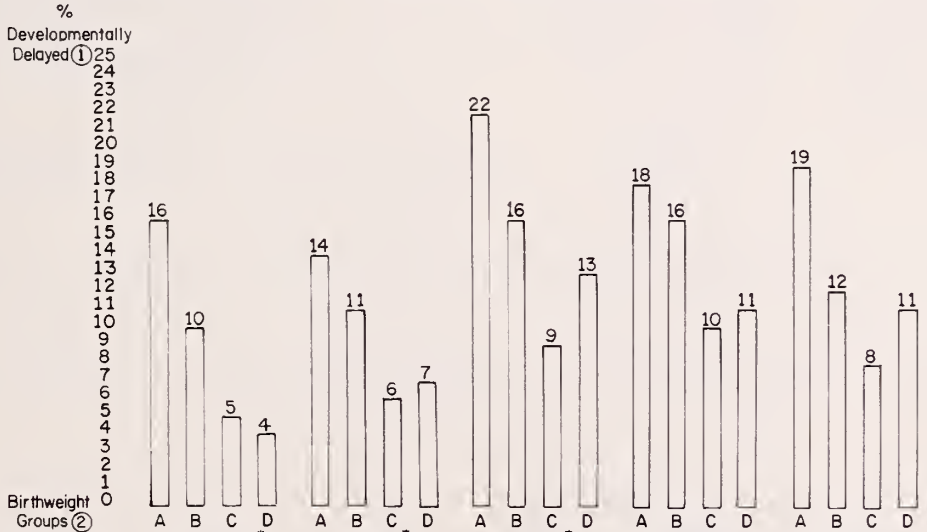
(1) Developmental Index Between 6-24 Months Equals Mental Development Index from Boyley Scales of Infont Development, Mean = 100, SD ± 16.

Developmental Index for Children Evaluated at 3 Years or Greater Equals Stanford Binet Intelligence Quotient, Mean = 100 SD ± 16.

Figure 3
Developmental Index Comparisons by Birthweight and Age at Follow-up Utilizing Last Evaluation

Fig. 3. — Developmental index comparison by birthweight and age at follow-up utilizing last evaluation.

Figure 4
Developmental Delay Comparisons by Birthweight & Evaluation Age
7/1/76-12/31/82



	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Number Developmental Evaluations	202	877	949	998	201	816	709	703	135	552	435	419	76	308	306	275	108	319	306	267
Number Delayed	33	88	47	39	28	86	45	48	30	86	39	56	14	49	31	30	20	39	25	30

* = Adjusted Chronological Age
(1) = Developmental Score ≤ 69.
(2) A = 500-1000g. B = 1001-1500g. C = 1501-2500g. D = 2501g.>

Fig. 4. — Developmental delay comparison by birthweight and evaluation age, 7/1/76 - 12/31/82.

Further reductions in developmental morbidity may be achievable by expanded perinatal high risk obstetrical services, expansion of tertiary neonatal intensive care beds, and addition of more perinatal centers with accompanying step-down units. The implementation of developmental intervention services within the Neonatal Intensive Care Centers and with accompanying post-discharge early childhood developmental services may also prevent or ameliorate developmental delay. These are some of the challenges of the next decade if we are to continue to improve the developmental functioning of those infants who require neonatal intensive care services.

Conclusions • Florida's Regionalized Perinatal Intensive Care Centers Program is committed to improving the quality of life for high risk infants. Its effectiveness is measured in part by assessing the developmental functioning of survivors. Developmental morbidity statistics over the last six years from the nine tertiary Perinatal Centers within Children's Medical Services indicate a reduction in the incidence of developmental delay for infants born prematurely or with severe medical complications.

Low birthweight infants, less than 1500 gm at birth, have had a three-fold reduction in the incidence of developmental delay in less than a decade (50% prior to 1973, 15.4% current study). Seventy five percent of the children admitted to the Neonatal Intensive Care Units had birhtweights greater than 1500 gm; their developmental delay percent was 8.5. Given these results, it appears that the Florida Regional Perinatal Intensive Care Program is a model for the prevention of developmental disabilities for premature and sick infants. The role and function of the developmental evaluation component need to be broadened to meet the current needs of the children being served as well as preparing for an increasing number of children who survive after neonatal care.

Acknowledgments

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References

1. Knoblock, J., Rider, R., and Harper, P.: Neuropsychiatric Sequelae of Prematurity. JAMA 161:77, 1956
2. Dawn, M. and Levine, S., et al: Development of Prematurely Born Children with Birth Weights of 1000 grams or Less, Pedeatrics 22:1037, 1958
3. Drillien, C.M.: Growth and Development in a Group of Children of Very Low Birthweight, Arch. Dis. Child. 33:10, 1958.
4. Harper, P.A. and Fischer, L.K., et al: Neurological and Intellectual Status of Prematures at 3 to 5 Year of Age, J. Pediatr. 55:6, 1959
5. Drillien, C.M.: Incidence of Mental and Physical Handicaps in School Age Children of Very Low Birthweight, Pediatrics 27:452, 1961
6. Douglas, J.W.B. and Gear, R.: Children of Low Birthweight in 1946 National Cohort, Arch. Dis. Child. 51:820, 1976.
7. Harper, P.A. and Weiner, C.L.: Sequelae of Low Birthweight, Ann. Rev. Med. 16:405, 1965
8. DeHarsh, K. and Jansky, et al: Comparisons Between Prematurely and Maturely Born Children at Three Age Levels, Am. J. Orthopsychiatry 36:616, 1966.
9. Egan, E.A., Boothby, R.J., and Prather, E.C.: Florida's Regional Perinatal Intensive Care Program, Impact on Mental Retardation. J. Florida M. A. 62:36, 1975.
10. Rawlings, G. and Stewart, A., et al: Changing Prognosis for Infants of Very Low Birthweight, Lancet 1:516, 1971.
11. Hardy, J.B.: Birthweight and Subsequent Physical and Intellectual Development, N. Engl. J. Med. 289:98-73, 1973.
12. Fitzhardinge, P.M. and Ramsey, M.: Improving Outlook for Prematurely Born Infants, Dev. Med. Child. Neurol. 15:447, 1973.
13. Stewart, A. and Reynolds, E.O.: Improved Prognosis for Infants of Very Low Birthweight, Pediatrics 54:724, 1974
14. Fitzhardinge, P.M.: Early Growth and Development in Low Birthweight Infants Following Treatment in Intensive Care Nursery, Pediatrics 56:162, 1975.
15. Stewart, A. and Turcan, D., et al: Prognosis for Infants Weighing 1000 Grams or Less at Birth, Arch. Dis. Child. 52:97, 1977.
16. Grassy, R.G. and Huhbard, C., et al: Growth and Development of Low Birthweight Infants Receiving Intensive Neonatal Care, Clin. Pediatr. 15:6, 1976.
17. Teberg, A. and Hodgman, J., et al: Recent Improvement in Outcome for Small Premature Infant, Clin. Pediatr. 14:4, 1977.
18. Rhodes, L.: Mental Development of Preterm Infants During First Year, Child. Dev. 48:204, 1977.
19. Teberg, A., et al: Recent Improvement in Outcome for Small Premature Infant, Follow-up of Infants with Birthweight of less than 1500 Grams, Clin. Pediatr. 14:307, 1977.
20. Sabel, K.G., et al: Remaining Sequelae with Modern Perinatal Care, Pediatrics 57 (5): 652, 1976.
21. Kitchen, W.H., Richards, A., Ryan, M.M., McDougall, A.B., Billson, F.A., and Keir, E.H.: Logitudinal Study of Very Low Birthweight Infants, II, Dev. Med. Child. Neurol. 21:582, 1979.
22. Hack, M., Fanaroff, A.A., and Merkatz, I.R.: Low-Birth-Weight Infant — Evolution of Chaning Outlook, N. Engl. J. Med. 301(2):1161, 1979.
23. Jones, R.A.K., Cummins, M., and Davies, P.A.: Infants of Very Low Birthweight, Lancet 2:1332, 1979.
24. Yu, V.Y.H. and Hollingworth, E.: Improving Prognosis for Infants Weighing 1000 Grams of Less at Birth, Arch. Dis. Child. 55:422, 1979.
25. Schechner, S.: For the 1980's. How Small Is Too Small? Clin. Perinatol. 7:135, 1980.
26. Kumar, S.P., Anday, E.K., and Sacks, L.M.: Follow-up Studies of Very Low Birth Weight Infants (1250 Grams or Less) Born and Treated Within a Perinatal Center. Pediatrics 66:438, 1980.
27. Stewart, A.L., Reynolds, E.O.R., and Lipscomb, A.P.: Outcome for Infants of Very Low Birthweights: Survey of World Literature, Lancet 1:1038, 1981.
28. Cohen, R.S., Stevenson, D.K., Malachowski, N., Ariagno, R.L., Kimble, K.J., Hooper, A.O., Johnson, J.A., Veland, K., and Sunshine, P.: Favorable Results of Neonatal Intensive Care for Very Low Birth-Weight Infants, Pediatrics 65(5):621, 1982
29. Driscoll, J.M., Driscoll, Y.T., Stein, M.E., Stark, R.I., Dangman, B.C., Perez, A., Wung, J.T., and Kaitz, P.: Mortality and Morbidity in Infants Less than 1001 Grams Birth Weight, Pediatrics 69(1):21, 1982.
30. Levene, M.I. and Dubowitz, L.M.S.: Low Birth Weight Babies Long Term Follow-up, Br. J. Hosp. Med. 28:487, 1982.
31. Horwood, S.P., Boyle, M.H., Torrance, G.W., and Sinclair, J.C.: Mortality and Morbidity of 500-1499 Gram Birth Weight Infants Live-born to Residents of Defined Geographic Region Before and After Neonatal Intensive Care, Pediatrics 69(5):613, 1982
32. Knobloch, H., Malone, A., Ellison, P.H., Stevens, F., and Zdeb, M.: Considerations in Evaluating Changes in Outcome for Infants Weighing Less than 1501 Grams, Pediatrics 69(3):285, 1982.
33. Orgill, A.A., Astbury, J., Bajuk, B., and Yu, V.Y.H.: Early Neurodevelopmental Outcome of Very Low Birth Weight Infants, Aust. Paediatr. J. 18:193, 1982.

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DEPARTMENTS

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NOTES & NEWS

Donald C. Jones appointed to advisory committee

Donald C. Jones, Executive Director and Chief Executive Officer of the Florida Medical Association, has been named to a high-level advisory committee to the American Medical Association.

The 12-member committee, called the American Association of Medical Society Executives (AAMSE) Advisory Committee to the Executive Vice President of AMA, provides advice and counsel on medical and health issues and related matters.

Mr. Jones' appointment to a four-year term was announced in Chicago by James H. Sammons, M.D., Executive Vice President of the AMA.

Mr. Jones, 41, joined the FMA staff in 1967 following his graduation from Jacksonville University. He was appointed Executive Director in 1974.

Mr. Jones is the second FMA executive to serve on the Committee. W. Harold Parham, D.H.A., FMA Executive Vice President, served as the first chairman of the committee in 1969, when he was President of AAMSE.

Tranquilizer use by father affects children

Like father, like son and like daughter when it comes to tranquilizer use, University of Florida research has found.

UF sociology professor Dr. Michael Radelet also found that tranquilizer users:

— Are more likely than nonusers to have friends and family members who use tranquilizers;

— Report more anxieties than nonusers;

— Are more aware of their own health and the health problems of their peers, but are more reluctant to talk about unpleasurable feelings to others;

— Have a lower willingness to tolerate pain than nonusers;

— Use more over-the-counter drugs and are less critical of advertisements for non-prescription medications than others;

— Are less apt than nonusers to see a link between pressure and stress and illness.

"My study only adds support to the view that tranquilizer use is part of a set of learned health patterns similar to the strategies and coping mechanisms used by one's family and friends," Radelet said.

To gather his data, Radelet evaluated 181 college students at a large Midwestern college. Of those, 46 used tranquilizers, 135 did not. He questioned them about their health beliefs, perceptions and behavior, their backgrounds and their parents' and friends' use of tranquilizers. His study was funded by the U.S. Public Health Service and the National Institute of Public Health.

Having fathers who use tranquilizers was the most common link among those who took prescription drugs to calm their nerves.

"Fathers and their children might experience similar levels of anxiety and families in which levels of anxiety are particularly high might react to that anxiety similarly," he said.

"Secondly, tranquilizer users' heightened level of health attentiveness and lower threshold of symptom tolerance might be shared by all members of their families, leading to similar patterns of illness behavior indirectly through health beliefs held in common.

"Third, children might directly imitate the father's health behavior, leading to tranquilizer use among those who have been taught that this is a proper and beneficial reaction to distress."

Radelet also found that tranquilizer users' gender, and parents' education and income are not statistically different from those of nonusers.

Aldo N. Serafini, M.D. receives appointment

Dr. Aldo N. Serafini, Professor of Radiology and Director of Nuclear Medicine at the University of Miami — Jackson Memorial Medical Center has been appointed to a two year term as a Trustee of the Society of Nuclear Medicine at the last annual meeting held by the Society in St. Louis. The Society is a multidisciplinary organization of physicians, physicists, chemists, radiopharmacists, technologists and others interested in the diagnostic, therapeutic and investigational uses of stable and radioactive nuclides in medicine.

Sexual behavior and child bearing patterns affect the risk of developing cancer

An individual's sexual and reproductive history can influence his or her risk of developing certain types of cancer, including cancers of the breast and cervix in women, and Kaposi's sarcoma in men.

"Current changes in lifestyle factors relating to sexual and reproductive behavior may have a greater potential for increasing cancer incidence than do such much-discussed factors as environmental contaminants," said Dr. Elizabeth M. Whelan, Executive Director of the American Council on Science and Health (ACSH).

ACSH Research Associate Cathy Becker Popescu reports that "for reasons which are not yet fully understood, the longer a woman waits to have her first child, the more likely she is to develop breast cancer at some time in her life."

Women who have their first child at age 35 or older are three times more likely than those who have a child before age 20 to develop breast cancer.

In terms of breast cancer risk, it would be ideal for all women who want children to begin their families before age 25, but of course, economic, career, marital, and other considerations will certainly prevent many women from doing so. Women who are in the high risk group can protect themselves by conscientiously following the American Cancer Society's guidelines for monthly breast self-examination and regular professional examinations. The sooner that breast cancer is detected, the more likely it is to be treated successfully.

Cancer of the cervix is more frequently in women who become sexually active before age 18 and in those who have many sexual partners.

"As with breast cancer, it is important for women in the high risk category for cervical cancer to be aware of it, and to be conscientious about having appropriate medical examinations," said Ms. Popescu. "In the case of cervical cancer, this means regular gynecological examinations and Pap tests. Precancerous changes in the cervix can be identified through Pap tests, allowing a developing problem to be detected and treated before it becomes too serious."

The rate of a rare and often fatal cancer called Kaposi's sarcoma has recently increased by as much as one hundred-fold among relatively young homosexual men in some U.S. cities. This cancer appears to be one consequence of Acquired Immunodeficiency Syndrome (AIDS), a poorly understood condition which can also increase an individual's susceptibility to certain other types of cancer and to unusual, dangerous infections.

The causes of AIDS, and its exact relationship to male homosexuality, remain a mystery. Increasing evidence suggests, however, that AIDS may be transmitted sexually. Therefore, homosexual men may be able to reduce their risk by decreasing their number of sexual contacts and choosing their partners carefully.

The American Council on Science and Health is an independent, nonprofit consumer education organization promoting scientifically balanced evaluations of food, chemicals, the environment, and human health. ACSH has offices in New York, New Jersey, and Washington, D.C.

A subscription to *ACSH News & Views* can be obtained from ACSH, 47 Maple St., Summit, NJ 07901.

PLI UPDATE

The physician-patient relationship

Frequently questions arise as to when a physician-patient relationship has been established and when it has effectively been terminated. In addition to questions of when a physician-patient relationship begins and ends, there are frequently special considerations. These involve the treating physician consulting with other physicians, emergency care and treatment, and specialist treatment of the patient. Each of these situations will be addressed in this article.

A physician-patient relationship is established when a physician undertakes to render professional services to the patient. These professional services can be rendered by virtually any form of treatment including talking with and advising a patient over the telephone. Generally, a physician is at liberty initially to refuse to assume any professional responsibility toward another individual. However, once the physician has entered into the professional relationship with the patient he is obligated to continue his services until they are no longer reasonably required, he is discharged by the patient, there is a mutual agreement to terminate the relationship, or he has been replaced in the case by another physician or otherwise properly relieved of his obligation.

A physician may treat a patient on a one time only basis, as long as it is understood by both parties and the arrangement is properly documented. However, if there is the need for on-going care, the physician must insure that the patient will be properly cared for.

When a patient is treated by a physician in an emergency situation, a physician-patient relationship is established. The emergency physician has a duty to continue treatment of the patient until the course of treatment is completed and the relationship is terminated or until the patient has been properly transferred to the care of another competent physician. When transferring the patient into the care of another physician, the treating emergency physician should document when care of the patient has been transferred, what the treating physician said to the new treating physician and what he said in return. In addition, the emergency physician should insure that care of the patient has actually been assumed by the new physician.

Consultation with other physicians entails many gray areas as to physician responsibilities. If a doctor serves only as a consultant for another doctor and does not actually participate in any way in the treating of the patient, then a physician-patient relationship is probably not established. However, if in the course of the consultation the physician examines the patient or renders any other professional services, a physician-patient relationship may be established and the consulting doctor should carefully document the fact that he is only serving as a consultant and not as a treating physician with an on-going duty of care.

Similarly, subsequent treatment by specialist may lead to confusion as to the original treating physicians' responsibility to the patient. Once a specialist has begun treatment of a patient, the original treating physician may withdraw from the case only if the specialist is competent to handle all of the medical problems of the patient. In addition, the fact that the original treating physician is withdrawing from the case should be made known to the patient and should be documented.

The vital consideration in any case is, of course, the welfare of the patient. If a physician has properly provided for the continuing care of a patient and has documented those provisions, then the physician should be safe in terminating his care of the patient. As noted throughout this article, the important considerations for the physician are that his services are no longer reasonably required, or he is discharged by the patient, or there is a mutual agreement to terminate the relationship, or he has been replaced in the case by another competent physician. Finally, all of these considerations are of little value to the doctor in the case of professional liability unless they are adequately and properly documented.

Other questions which frequently arise pertaining to the termination of a physician-patient relationship involve either patients who have continually missed appointments, refused to follow treatment instructions or refused to pay their medical bill. In each of these cases, the physician-patient relationship is not terminated until the doctor informs the patient that the relationship has been terminated and makes proper provisions for other care and treatment. This involves continuing care and treatment of the patient regardless of their obstinance in any of these situations until a sufficient time period has elapsed for them to seek other treatment adequate for their individual situation.

Prepared and submitted by: John E. Thrasher, J.D., Vice President and Legal Counsel — Professional Insurance Management Company (PIMCO) and Thomas S. Edwards Jr., Law Clerk

WORTH REPEATING

Offensive medicine

A young woman was seen in a local hospital emergency room for a syncopal episode. She had had a three-martini lunch without benefit of breakfast, became dizzy and passed out. She was released several hours later following arterial blood gases, CBC, SMA-18, chest and skull x-rays, two EKG's, and CT scans of the brain with and without enhancement. She was told her studies were normal, but she should have an EEG and should see a neurologist as soon as possible. Except for the after-effects of her bill, she felt fine at the time of discharge.

A young man was brought to the emergency room with a seizure and was noted to have hemiparesis. He had a history of a seizure disorder with post-ictal paresis well documented in his hospital records. Despite admissions for the same problem, he had his fifth CT scan performed, along with numerous other studies. He was admitted to "rule out stroke."

We all have known similar overuse of tests in the emergency room. Patients with viral sore throats have been subjected to cultures, CBC's, chest x-rays, ABG's and sometimes EKG's, running up hundreds of dollars in charges before they were given a decongestant and told to see their doctor in the morning.

Defensive medicine has reached its zenith in the modern emergency room. It sometimes seems a study is ordered for the same reason Sir Edmund Hillary climbed Mt. Everest — because it is there. Some physicians seem to use the lab to try to compensate for lack of diagnostic skills, hoping the tests will make the diagnosis. They believe that the emergency and threat of a suit justify any expense.

Patients are beginning to rebel against such abuse. They are looking to other sources for care, in the form of HMO's and Walk-In Emergency Clinics, which profess to cost less. Today's doctor must be cost-effective as well as infallible.

The emergency room is a sensitive area to criticize. Decisions are made under intense pressure by doctors with no personal knowledge of the patients they treat, and with precious little feedback to show them whether they are handling cases properly. This, added to the medicolegal pressure to always be correct, results in abuses such as those noted above.

One solution is to replace defensive medicine with common sense. If a patient presents a minor complaint, nothing is lost by treating it symptomatically (with full explanation), and having another physician obtain tests (if indicated) the next day. Money will be saved by ordering tests through a private lab instead of the hospital, and seldom will treatment be delayed more than twelve hours by so doing. It seems silly to evaluate a sore throat or headache with the same aggressiveness accorded the patient with chest pain or bleeding.

The problem could be further resolved by private physicians resuming the responsibility for afterhours care of their patients instead of sending them to the ER. This will become a reality only as doctors realize that they are losing patients to walk-in clinics which are now springing up on every street corner. Doctors have abdicated their roles in patient care after five o'clock, and in so doing have turned the emergency rooms into very expensive all-night walk-in clinics.

Another alternative might be to eliminate ER testing of those patients who are obvious candidates for admission based on history and physical. No patient with chest pain needs to wait in the ER for results of cardiac enzyme determinations. Certainly, no patient with suspicious chest pain should be discharged because of normal enzyme studies (so why order them as an emergency study?). Does every patient with sudden onset of aphasia and hemiparesis require a CT brain scan before a disposition can be made by the ER physician? Does every patient with a headache need a brain scan? (A recent *Archives of Internal Medicine* article suggested that it cost nearly $24,000 to diagnose one brain tumor in patients with headaches but no abnormality on neurological exam.) Even if it were agreed that brain scan was necessary to evaluate every headache patient, it still would not seem warranted as an emergency procedure for headache.

Obviously, emergency physicians need freedom to practice their art, and should not be hemmed in with restrictive regulations in the name of "cost effectiveness." However, if ER physicians could give some extra thought to the ordering of tests, both medicine and society will be well served. If tests can be ordered based on need to make a safe disposition, rather than on availability, a great deal of money will be saved, the patient will not be hurt, and the physician will regain credibility. Finally, if private doctors were more available after office hours, we would greatly reduce the pressure on doctors to practice defensive medicine, and we would not need to worry about the impact of walk-in clinics on our practices.

J.E. Perchalski, M.D.

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Another medical Dodo bird?

I sometimes wonder if the disappearance of the 5-cent cigar and the steam locomotive weren't precursors of the demise of professional courtesy. This is a most important part of the practice of medicine, and it deserves some thought.

Reasons why this is found to be lacking can be only speculated. We all get too busy — too much in a hurry — to remember our manners. Maybe the medical schools are not addressing the matter early and often enough. Maybe our colleagues educated in other lands are taught a different etiquette than ours. Or maybe, as our numbers increase, our fervor to protect our patients makes us forgetful.

Let's review some of the more prevalent blemishes on our medical community. You are called away from a patient to answer the call of another physician. When you get on the telephone, you discover that you are speaking with his secretary. You will talk to him only when he comes to the phone. Surely, your time is as valuable as his. He probably never stopped to think. This discourtesy could easily be corrected.

I have encountered situations where consultation was requested of a physician (in situations where the chart was in good order and the specific consult request was made plain), only to receive a call from the nurse that the consulting physician was "too busy" to comply with the request. Wouldn't a personal reply have, at least, been in order?

But that's not all. Have you ever called a physician, to whom you planned to refer a patient, and been told that he could not come to the phone — "he's with a patient." He's not scrubbed or indisposed in any way, just "with a patient." So were you until you made your first mistake and called him.

If we have difficulty with the doctor-doctor relationship, it follows that the doctor-patient relationship may also be threatened. All physicians should be able to communicate with their patients and their

peers. Family physicians are supposed to be closer to their patients, to listen more to them. So also we should be closest to our medical colleagues.

It is no wonder that professional liability insurance premiums have joined the Space Shuttle in ascending to astronomical heights. Better efforts on our behalf to practice professional courtesy will be contagious, and it will result in a better communication with our patients also. This cannot help but improve the atmosphere of medicine in which we practice, and we won't have another Dodo.

Kendall M. Beckman Jr., M.D.
Melbourne

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A new unit for international monetary exchange — SCRU

Accepted standards for describing the currency transactions of large businesses, the federal government or those of foreign countries are rather archaic. Certainly to the average[a] American taxpayer, gold and silver are, for the most part, only of limited archeological or literary interest. More practically, the kilograms of gold or megatons of silver to be envisioned, say, in the financing of one Russian wheat exchange are beyond the meager imagination of all but a select few. And those few who do comprehend these sums are probably involved in the deal anyway.

What to do?

We must develop a practical standard having an intrinsic worth which is known to all humankind and has units amenable to mathematical manipulation. Shells and beads, barrels of oil, bubble gum cards, seal blubber, bread fruit, Mafiosa capo favors, plastic credit cards and other regional fiscal tokens must be rejected because they fail to meet one or more of the above criteria.

However, modern science, plus technology, has given us hope without really trying. The new unit for comparison is, of course, the human baby! Certainly all humans recognize the baby immediately. While aborigines may have great difficulty dealing with oil or seal blubber exchanges, show them a baby and, presto, instant understanding! Poor and rich alike, butchers, bakers and liquid diode makers all recognize the infant immediately.

The intrinsic worth of the baby is known clearly to all. Poets, healers, metaphysicians, scientists, tax accountants, and, of course, parents all hold the babe to be most precious (bibliography on request).

What modern medical science has done to make baby into a standardizable, interchangeable commodity is to establish, at last, its financial worth. Let's be more specific.

Recent advances in newborn care have improved the survival of premature infants dramatically but at a finite and calculable, albeit astronomical, cost. Pomerance[1] et al., have pointed out that the average total hospital cost for a surviving one kilogram infant is $40,287. Since usual newborn practice is to discharge such infants when they reach 2.5 kg, no matter what or how much it takes, we can quickly compute the value for such infants. That sum is $26,858 per kilo (or, for the more traditionally disposed, $13,429 per pound). This unit, aptly labelled SCRU,[b] can be standardized according to each nation's currency and recalculated annually according to rates of inflationary increase. Indeed, Pomerance points out that charges rose 31% between submission of his paper and its publication. But baby never changed![c]

Just think — no longer do we need to ponder grams of gold or pounds of silver when our taxes are globally distributed. Further, our national political leaders now can say that a B-59 costs a mere one and a half million pounds of baby (or 1.5 mega SCRUs to be precise).

Mega, kilo, milli and micro SCRUs have incredible potential for everyday usage. A sportscar is only 0.5 SCRUs, a new house 5 SCRUs, a home video recorder is 1 milli SCRU, an X-rated movie is one micro SCRU[d] and so on through the entire litany of American spending.

We humbly propose that the fiscal SCRU is a concept whose time is now.

Bibliography

1. Pomerance, J.J., et al: Cost of Living for Infants Weighing 1000 Grams or Less at Birth, Pediatrics 61(6):908, 1978

a Here defined as mean and standardly deviate.
b. Surviving Child Relative Unit in value per weight.
c. This is a metaphoric usage, as all parents and diaper companies will testify.
d Note how this usage has a societal connotation as well.

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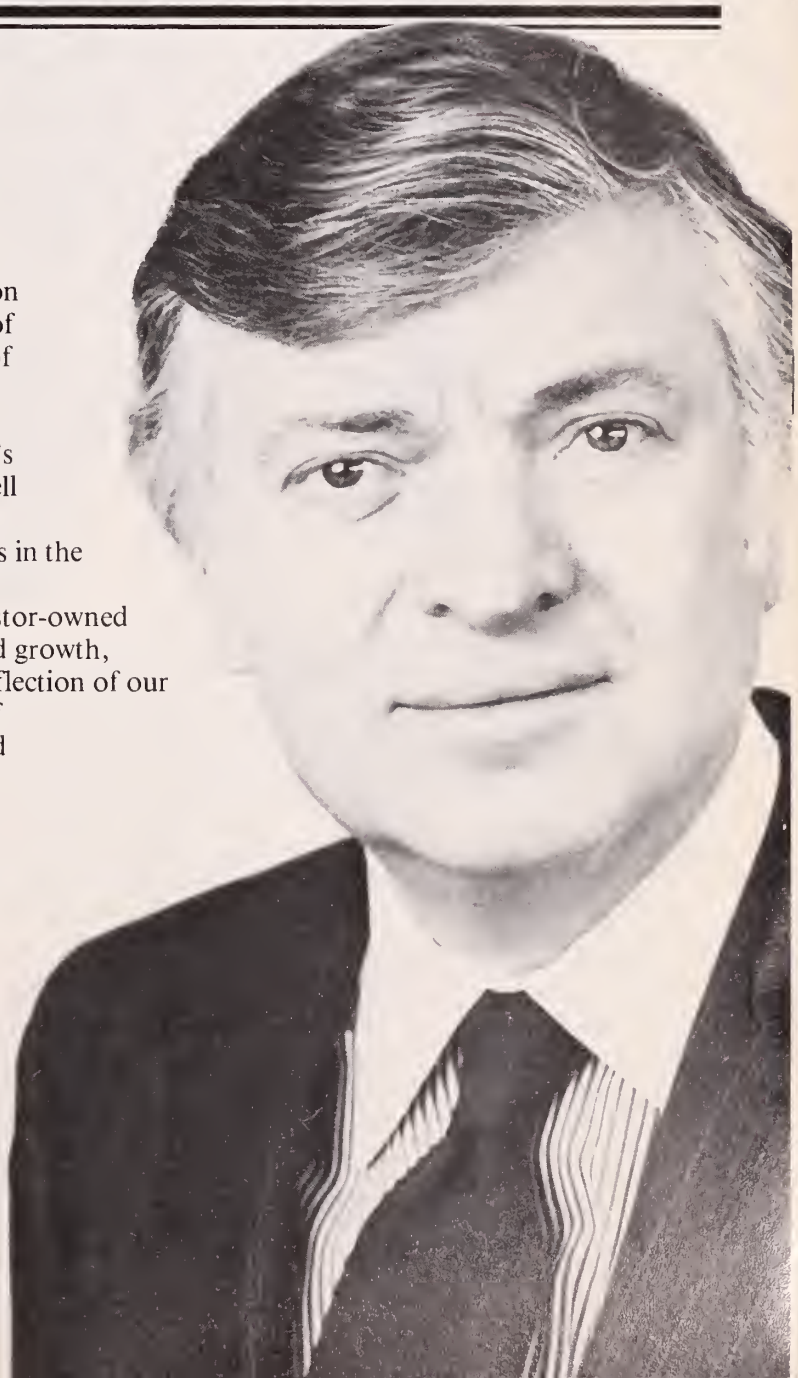
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and D'Artagnan

ONE FOR ALL – One tablet treats pinworm in any patient, regardless of age or body weight.* Obviates need to calculate individual dosages.

A single tablet eradicates pinworm in 95% of patients.

*Contraindicated in pregnant women and in persons who have shown hypersensitivity to the drug.

VERMOX® CHEWABLE TABLETS
(mebendazole)

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The #1 anthelmintic for pinworms and many other worm infestations

VERMOX® CHEWABLE TABLETS
(mebendazole)

℞

Vermox
Tabs #4
Sig 1 tab
each family
member



DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 μg/ml and 0.09 μg/ml, respectively.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5%-100%)	–	–

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

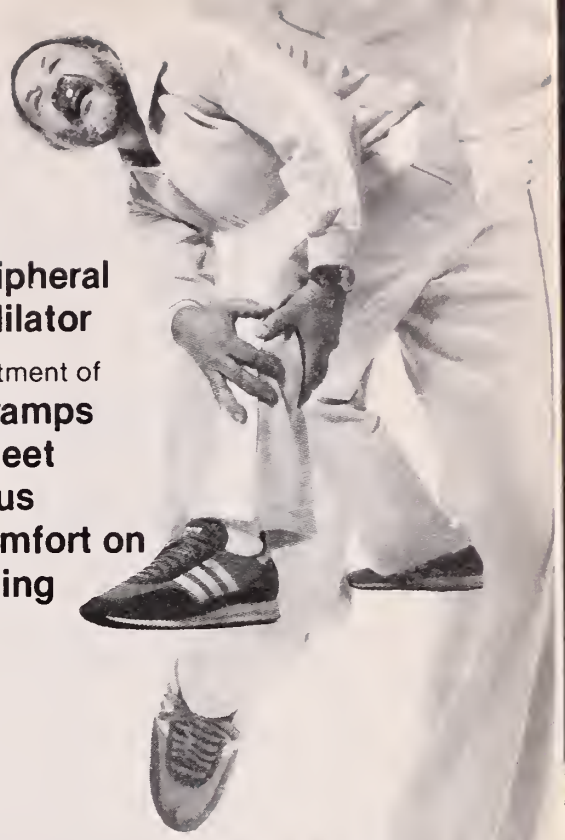
HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium.

US Patent 3,657,267
December 1979

Committed to research...
because so much remains to be done.

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Pyridoxine HCL (B-6) 10 mg.
in a special base of prolonged therapeutic effect.
DOSE: 1 to 2 tablets daily.
AVAILABLE: Bottles of 100, 500.

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Each yellow tablet contains:
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Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

LIPO-NICIN®/100 mg.

Each blue tablet contains:
Nicotinic Acid 100 mg.
Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 5 tablets daily.
AVAILABLE: Bottles of 100, 500.

Indications: For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

Side Effects: Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

Contraindications: Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

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Physician, how good is your image?

If you haven't thought about it lately, you may be in for a surprise. In the last few years, doctors have been on the receiving end of some very unfavorable publicity.

Medical families have, for the most part, stood quietly by hoping that the ugly problem of malpractice on the rise would disappear. Instead, the flame has been fed and nutured. Now they are even being criticized for their personal lifestyles.

Florida is not unique. All across the country doctors are being put down because of the cars they drive, the houses they live in, the clubs they belong to, etc.

It is time to fight back. There is no better defense than a strong offense. Your spouses in the FMA-A have had enough. This year we have launched an aggressive campaign to improve our public image.

We will not apologize for the money you earn or the way in which we live. Instead, we will shift public focus from our private lifestyles to our public service activities. The medical family as a whole probably contributes more volunteer hours to public service than any other professional group. In the past, we have quietly pursued these activities without calling much attention to ourselves. Now that is being changed.

The first step in our new campaign to improve our image is directed towards the media. We have designated October 4, 1983 as "Media Day" throughout Florida. On this day, in every county, receptions will be held for media representatives from TV, radio, newspapers and magazines. These receptions will be held in areas where we do volunteer work: hospitals, blood banks and other such service-orientated places.

We will establish one-to-one relationships with members of the media just as we have done with our legislators. These contacts will be maintained throughout the year.

We are in the process of producing a five minute audio-visual presentation showing auxilians and their spouses in every facet of community service. The presentation is professional and will utilize the latest techniques in the industry. We will show this presentation to community service groups all over the state and form new coalitions.

At our Fall Conference at Cypress Gardens in September, we are devoting an entire day to a working Public Relations Seminar. Individual counties will be taught how to set up television programs on "Health Care Information". These programs will be used for radio and newspapers. Many of you will be called upon to participate throughout the year. Certain special events in the counties will receive state and national attention.

Auxilians will keep an "Hours Bank Log". This will be a total of all hours spent in community service, whether through auxiliary or other service organizations. I believe the amount of hours will surprise even auxilians themselves. Next May we will publicize these hours and have appropriate awards.

Even though we are the second largest medical auxiliary in the United States, we will continue to recruit new members. We realize the strength in numbers. We will continue to expand our ranks.

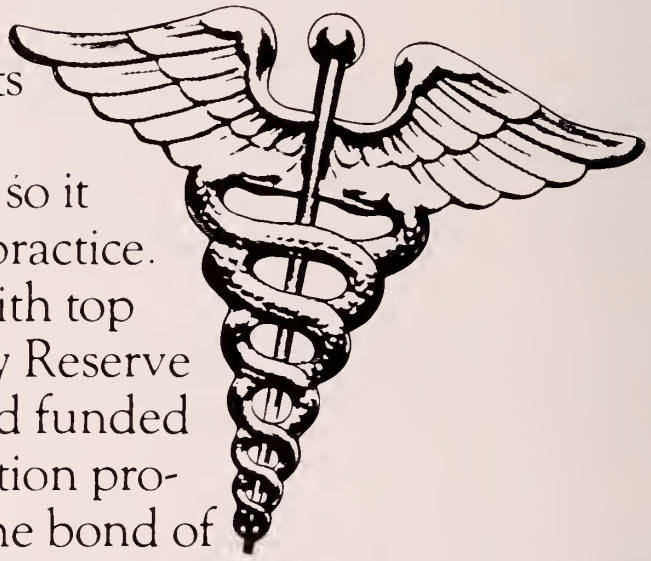
We would like to be on your county medical society programs and share with each of you more of our ideas and plans to improve our image. As an individual, there are many things you can do to help. We invite you to work with us. This is a long-range program. Things will not change overnight. We *must* start now in order to prevent further erosion.

Working together, we *will* make a difference. Doctors and their families will once again be respected and public confidence restored.

Georgia Canakaris
Public Relations Chairman
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CONTRAINDICATIONS: Hypersensitivity to Codeine-containing preparations, the potential for abuse and dependence may occur. Administration is not recommended over an extended period. In ambulatory patients, Codeine may impair mental and/or physical abilities.

Interaction with other CNS depressants (anesthetics, tranquilizers, sedatives) may exhibit additive CNS depression.

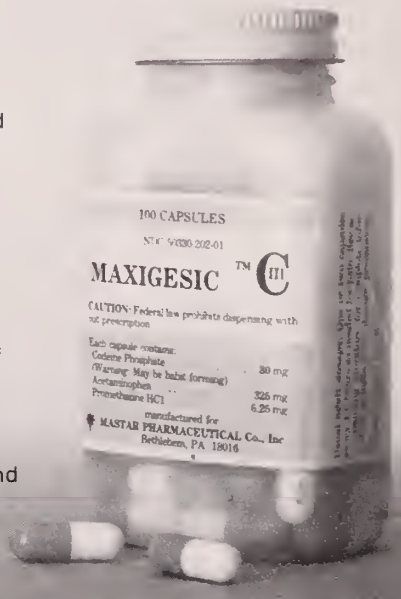
Usage in Pregnancy: Safe use has not been established in pregnant women.

Pediatric Use: Should not be administered to children under 12.

PRECAUTIONS: Increased cranial pressure may occur in presence of head injury. Promethazine should be administered cautiously to patients with cardio-vascular or liver disease. Acute abdominal conditions may be obscured. The drug should be given with caution to the elderly or debilitated, and those with severe impairment of hepatic and renal function, hyperthyroidism, Addison's disease and protatic hypertrophy or urethral stricture.

ADVERSE REACTIONS: The most frequently observed reactions include dizziness, lightheadedness, sedation nausea, vomiting and constipation.

DOSAGE AND ADMINISTRATION: Dosage should be adjusted to severity of pain, and the response of the patient. The usual dose is in one or two capsules every 4 to 6 hours as required.



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Meetings

Accepted by the FMA Committee on Continuing Medical Education for Mandatory Credit

OCTOBER

Interventional Cardiology: Implications for the Clinician, October 1, Miami Heart Institute, Miami. For information: Paul S. Swaye, M.D., c/o Miami Heart Institute, 4701 N. Meridian Ave., Miami Beach 33140.

International Radiology Symposium, October 6-7, Hadassah Hospital, Jerusalem. For information: Ernest R. Wollin, M.D., P.O. Drawer R, Leesburg 32748, (904) 787-5858.

Basic, Intermediate and Advanced Hypnosis Workshop, October 6-9, Bahia Mar Hotel, Ft. Lauderdale. For information: Jeffry Winkelman, D.D.S., 4179 North State Road Seven, Fort Lauderdale 33313, (305) 484-4140.

The Professional & Chemical Dependency, Oct. 7, Holiday Inn, Pensacola Beach. For information: B.B. Jordan, M.D., Rt. 2, Box 174, Gulf Breeze 32561.

AAFP Annual Scientific Assembly, October 10-13, Miami Beach Convention Ctr., Miami. For information: Edward Daleske, (816) 333-9700 (Missouri).

Better Patient Care Through Marketing, Oct. 12, Miami Bch. Convention Center, Miami Bch. For information: Andy Morley, M.D., Suite 333, 755 Columbia Drive, Decatur, GA 30030, (404) 373-0405.

Anxiety: Symptom or Diagnosis? Rationale for Recognition and Management, Oct. 13, Fountainebleau Hotel, Miami Beach. For information: Robert E. Rakel, M.D., UICM, Iowa City, Iowa, (319) 356-2813.

Diagnostic and Treatment Dilemmas in Office Psychiatry, October 14, Marriott Hotel, Orlando. For information: Orris O. Rollie, M.D., (305) 896-6611, Ext. 1815.

Profiles in Arthritis, October 15, Marriott Hotel, Orlando. For information: Orris Rollie, M.D., (305) 896-6611 Ext. 1815.

Comprehensive Management of Multiple Sclerosis, October 15, Royce Hotel, W. Palm Bch. For information: Leni Scheimer, (305) 763-6203.

18th Family Practice Review, October 17-21, Dutch Resort Hotel, Lake Buena Vista. For information: L. Crevasse, M.D., (904) 392-3143.

9th Annual Pan American Seminar, October 17-22, Mount Sinai Medical Center, Miami Bch. For information: Frederico R. Justiniani, M.D., MSMC, 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", October 20, Loch Haven Arts Center, Orlando. For info.: Francine Andia, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910,

Cutaneous Signs of Connective Tissue Disorders: Lupus Erythematosis, Dermatomyositis and Scleroderma, Oct. 20, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Ave., Spring Hill 33526, (904) 683-9400.

Advanced Cardiac Life Support, October 22-23, University of South Florida & Bayfront Medical Center, Tampa & St. Petersburg. For information: Charles Aucremann, M.D., University of South Florida College of Medicine, Dept. of Family Practice, Tampa (813) 823-1234.

One Day Review of Electrocardiography, Oct. 26, Sheraton Sand Key Hotel, Clearwater. For information: Mrs. Jonni Cooper, R.N., Rogers Heart Foundation, 601 12th Street North, St. Petersburg 33705, (813) 596-2047.

Advanced Neuroradiology Seminar, October 26-29, Near Disney World, Orlando. For information: Charleen Krissman, 12901 North 30th Street, Tampa 33612, (813) 974-2538.

Advanced Trauma Life Support (ATLS), October 27-28, University of Florida, Gainesville. For information: Rita Goldberg, American College of Surgeons, (813) 936-2414.

24th Workshop in Electrocardiography, October 27-31, Sheraton Sand Key Hotel, Clearwater Beach. For information: Henry Marriott, M.D., Saint Anthony's Hospital, St. Petersburg, (813) 894-0790.

Third Annual Medical Conference, Oct. 28-29, La Romana, La Romana, Dominican Republic, For information: A. Gonzalvo, M.D., P.O. Box 27184, Tampa 33688, (813) 879-3400.

68th Scientific Assembly, Oct. 31-November 3, Diplomat Resort, Hollywood. For information: Ray W. Gifford Jr., M.D., (608) 257-6781.

NOVEMBER

Cardia Arrhythmias, 1983, November 2-4, Mount Siani Medical Center. For information: P. Samet, M.D., 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", Nov. 3, Cedars of Lebanon Medical Ctr., Orlando. For info.: Francine Andia, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

Spinal Deformities, November 6-9, Sheraton Bal Harbour, Bal Harbour. For information: Barry Silverman, M.D., 4300 Alton Rd., Miami Beach 33140, (305) 674-2121.

Internal Medicine Update '83, November 7-11, The Colony, Sarasota. For information: Murray Grossman, M.D., Upstate Medical Center, Syracuse, NY (315) 473-4467.

Non-Cardiac Surgery in the Cardiac Patient, November 11, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Ave., Spring Hill 33526, (904) 683-9400.

Seventh Florida Suncoast Perintal Conference, Nov. 10-12, Holiday Inn Surfside, Clearwater. For information: Margo Armstrong, (813) 823-1234, Ext. 3858.

Practical Problems in Cardiovascular Medicine for Family Physicians, Nov. 13, Fountainbleau Hotel, Miami Beach. For information: Herschel Douglas, M.D., East Tennessee State University, Box 23320A, Johnson City, TN 37614, (615) 928-6427.

Diagnosis and Treatment of Pulmonary Embolism/Deep Vein Thrombosis, November 14, St. Mary's Hosptial, West Palm Beach. For information: Gerald J. O'Connor, M.D., St. Mary's Hospital, 901 45th Street, West Palm Beach 33407, (305) 659-1633.

International Symposium on Gynecologic Oncology, Surgery, and Urology, November 14-16, James Knight International Convention Center, Miami. For information: William Little, M.D., University of Miami, (305) 547-6944.

Ninth Annual Course in Behavioral Neurology & Neuropsychology, November 16-19, Sarasota Hyatt, Sarasota. For information: Edward Valenstein, M.D., 2030 N.W. 71st Street, Gainesville 32605.

7th Annual Childhood Cancer Treatment Seminar, Nov. 17-19, Caribbean Gulf Resort Hotel, Clearwater Beach. For information: Cindi Butson, P.O. Box 13372, University Station, Gainesville 32604, (904) 375-6848.

Advanced Trauma Life Support, (ATLS), November 17-18, University of Florida, Gainesville. For information: Rita Goldberg, American College of Surgeons, (813) 936-2414.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case," November 17, Holiday Inn, Tampa. For info: Francine Andia, PIMCO, P.O. Box 40198, Jacksonville, 32203, (904) 354-5910.

33rd Annual Postgraduate Seminar — Deiabetes Mellitus, November 30 - December 2, Mt. Sinai Medical Center, Miami Bch. For information: Lee Goldberg, M.D., 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

DECEMBER

Emergencies in Internal Medicine VI, December 1-5, Frenchman's Reef Hotel, St. Thomas, Virgin Islands. For information: Laurence Gardner, M.D., University of Miami, (305) 325-6337.

Clinical Allergy & Immunology for the Practicing Physician, December 8 - 10, Buena Vista Palace, Lake Buena Vista. For information: Richard F. Lockey, M.D., (813) 972-2000, Ext. 597.

The First Thirty Minutes: The Boston City Hospital Approach to Medical and Pediatric Emergencies, December 27, Buena Vista Palace Hotel, Lake Buena Vista. For information: R. Levin, M.D., Boston City Hosital, 818 Harrison Avenue, Boston, MA 02118, (617) 424-5421.

JANUARY 1984

Oral Pathology Review Histology, Differencial Diagnosis and Management, Jan. 9-13, University of Miami, Miami. For information: Division of CME (D23-3), University of Miami School of Medicine, Post Office Box 106960, Miami 33101, (305) 547-6716.

16th Annual Postgraduate Seminar in Pediatric & Adult Urology, January 18, 21, Sheraton Bal Harbour Hotel, Miami Beach. For information: Victor A. Politano, M.D., 6614 Miami Lakes Drive East, Miami Lakes 33014, (305) 687-1367.

Treatable Life Threatening Cardio-Pulmonary Episodes, January 20-21, Diplomat Hotel, Hollywood. For info.: Marvin L. Meitus, M.D., 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

Continuing Education in Pediatrics, January 22-26, Diplomat Hotel, Hollywood. For information: Donald Altman, M.D., 6125 SW 31st St., Miami, FL 33155.

Sixth Annual Walt Disney World Pulmonary Wintercourse, January 26-29, Hotel Royal Plaza, Lake Buena Vista. For information: M. Braunstein, M.D., 5526 Arlington Road, Jacksonville 32211, (904) 743-2933.

Round Table Day, January 27, Diplomat Hotel, Hollywood. For information: Donald Altman, M.D., 6125 SW 31st St., Miami 33155, (305) 666-6511.

Oculoplastic Symposium 1984, Jan. 28 - Feb. 4, Virgin Islands. For information: L.B. Katzen, M.D., 2889 Tenth Avenue North, Lake Worth 33461, (305) 964-0707.

FEBRUARY

Breast Disease Update II, February 1-5, Hilton at Walt Disney World Village, Lake Buena Vista. For information: Lourdes Fuentes, 4300 Alton Road, Miami Beach 33140, (305) 674-2424.

Second Annual Interventional Neuroradiology Seminar, Feb. 5-8, Walt Disney World Village, Plaza, Lake Buena Vista. For information: Charleen Krissman, 12901 North 30th Street, Tampa 33612, (813) 974-2538.

3rd Symposium on Burn Care, February 10-11, Sheraton World, Orlando. For information: Hal C. Bingham, M.D., Box J-233, JHM Health Center, Gainesville 32610, (904) 392-3711.

Conference on the Beach, February 20-25, Daytona Hilton, Daytona Beach. For information: Richard Dodd, M.D., P.O. Box 1990, Daytona Beach 32015, (904) 258-1584.

Pediatric Dermatology Seminar XI, February 23-26, Doral Beach Hotel, Miami Beach. For information: Guinter Kahn, M.D., 16800 NW 2nd Avenue, N. Miami Beach 33169, (305) 652-8600.

MARCH

Advances and Improvements in Hernia Surgery, March 15-17, Doral Beach Hotel, Miami Beach. For information: Arthur Gilberg, M.D., 6615 Miami Lakes Dr., E., Miami Lakes 33014, (305) 624-7081.

INFORMATION FOR AUTHORS

The Journal is the official publication of the Florida Medical Association. Its purpose and scope include not only the dissemination of scientific information but also communication of FMA activities and reportage of other subject matter relevant to the practice of medicine. Hence, the editors encourage submission of scientific papers (investigative studies, reviews, new technology, case reports); discussions of medical history and ethics, and articles dealing with socioeconomic, governmental, and legal issues as related to medicine.

Manuscripts should be submitted to Daniel B. Nunn, M.D., Editor of *The Journal*, Florida Medical Association, Post Office Box 2411, Jacksonville, Florida 32203, in original and three duplicate copies. Copies should be typewritten and double spaced.

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Each of the following should begin on a new page: abstract, first page of text, legends for illustrations, tables and acknowledgements. Each page should include a running head and surname of senior author.

Abstract. All scientific manuscripts should include a 150 word, maximum length, abstract which is a factual (not descriptive) summary of the work. This replaces the summary and precedes the article.

Title should be short, specific, clear and amenable to indexing.

List affiliations for each author. If author's present affiliation is different from affiliation under which the work is done, both should be given.

References. The following minimum data should be given: names of all authors, complete title of article cited, name of journal abbreviated according to *Index Medicus*, volume number, page numbers and year of publication. All references must be cited in the text and should be arranged according to order of citation and numbered consecutively. If references are too numerous, the editors reserve the right to eliminate with notation: "References are available from the author(s) upon request."

All accepted manuscripts are subject to copy editing. Authors receive a galley proof for approval before publication. No changes are accepted after galley is returned. Forms for ordering reprints are included with the galley proofs.

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Permission letters must accompany patient photos whenever there is a possibility of identification. Prepare in accordance with state laws and specify authority to publish.

Letters submitted for publication should be designated "For Publication."

When received, the senior author will be sent an acknowledgement of receipt and a copyright agreement which must be signed by all collaborators. Should the article fail to be accepted for publication, the agreement will be returned.

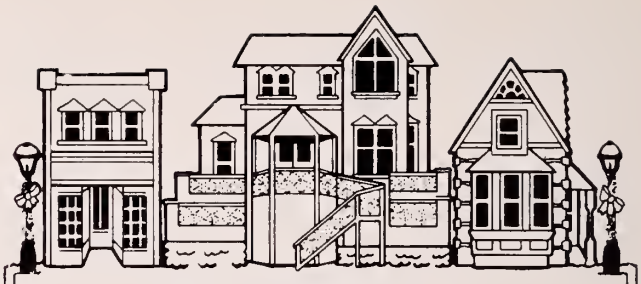
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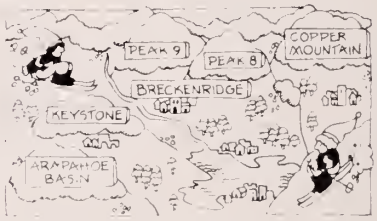


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IMMEDIATE OPENINGS for one Family Practitioner and one internist, Board certified or eligible for multispecialty association. West coast of Florida, thirty miles north of Clearwater and Tampa, minimum guarantee with incentive first year, partnership opportunity after 1st year. Send C.V. to Michael Gossman, Community Health Center, 1150 Plaza Drive, New Port Richey, Florida 33553.

BOARD CERTIFIED OTOLARYNGOLOGIST seeking Board Certified or eligible associate with strong interest in facial plastic & maxillofacial surgery. Practice encompasses all aspects of otolaryngology, facial plastic surgery, head & neck surgery, upper respiratory tract allergy. Located in central Fla. - Lakeland, 30 miles east of Tampa on Florida's West Coast. Attractive climate and recreational advantages. Prosperous growing community. Excellent starting salary leading to partnership. Please send CV to: Lakeland · ENT, Post Office Box 1725, Lakeland, FL 33802.

PRIMARY CARE FACILITY in West Palm Beach seeking part time physicians for hourly work, and full time positions for future facilities. Send C.V. to Administrator, Post Office Box 25986, Tamarac, Fla. 33320.

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EMERGENCY ROOM PHYSICIAN — Board certified, Florida licensed, for a Central Florida small hospital near Disney and Orlando. Full time, 40 hours plus per week. Reply: C-1147, P.O. Box 2411, Jacksonville, FL 32203.

INTERNIST/ Board certified or Board eligible: Group of 17 Board Certified Internists, several subspecialty certified, seek association with a Board Certified or Board Eligible internists. Excellent academic stimulus; financial security with progressive incentive. No investment necessary. Beautiful area of Palm Beach, Fla. Please send curriculum vitae to C-1137, Post Office Box 2411, Jacksonville, FL 32203.

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FLORIDA GULF COAST: Positions available in Freestanding Emergency Centers for either experienced or residency-trained Family or Emergency Physician. Guaranteed competitive salary and attractive incentives with paid malpractice, health, dental and life insurance and vacation. Florida License and U.S. education and training required. Send CV to EmergiCenter, c/o Bernie Reamer, Administrator, 6950 Pensacola Blvd., Pensacola, Florida 32505 or call (904) 478-4357.

PRIVATE PEDIATRICIAN on east coast of Florida with rapidly growing medical practice is looking for another pediatrician. Relationship is negotiable, but possibilities include sharing office space, working for a salary, or partnership. If interested please send a copy of your curriculum vitae to 760 NE Stokes Terrace, Jensen Beach, FL 33457. To set up an interview call Faith Tyndall's office in Tampa, Florida (813) 961-9205.

FULL TIME & PART TIME general practitioner to work in walk-in clinic in Broward County. Different shifts available. Malpractice, health insurance and vacation provided. Please write: C-1138, Post Office Box 2411, Jacksonville, FL 32203.

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PSYCHIATRIST needed for JCAH accredited hospital for children and adolescents. Position includes diagnostic evaluations, treatment and some staff development. Strong effective staff, utilizing multi-disciplinary concept. Must be licensed in Georgia/ Florida and have experience with children and adolescents. Call or write J. Henry Evans, Administrator, 4771 Annewakee Road, Douglasville, GA 30135. (404) 942-2391.

POSITION OPEN: Medical Ophthalmologist wanted in large midwest practice that is affiliated with university training program. Excellent medical skills required. Knowledge of argon laser preferable. Opportunity to assist in surgery and learn YAG Laser available. Excellent salary plus generous benefits and rapid advancement depending on qualifications. Send resume to: C-1155, P.O. Box 2411, Jacksonville, FL 32203.

F.P. TO JOIN OTHER G.P. wanting to work part-time; attractive 1600 square foot office with all facilities; will introduce and get E.R. work. (305) 331-7781 or 886-5361.

PRIMARY CARE PHYSICIAN, board certified/board eligible. Progressive multi-specialty medical center in Southern Palm Beach County seeking primary care physician. Only BC/BE apply. Handsome compensation package. Please contact Johnathan W. Rose, Administrator, at (305) 482-6042 or 6045.

FLORIDA LICENSE REQUIRED — Family practice or general practitioner with some public health and military background. Reply: Collier County Health Department, Post Office Box 428, Naples, Florida 33939, (813) 774-8210.

MEDICAL CONSULTANTS NEEDED: Triad Data Systems, Incorporated of Tampa, Florida, wishes to create Board of Physicians for creative development of sophisticated computer programming. Inquire to: Mr. John Thomas Henegar, Suite #1606, 2413 Bayshore Blvd., Tampa, FL 33629. Immediate Need.

IMPAIRED PROFESSIONAL CONSULTANT — The Board of Medical Examiners, State of Florida, is recruiting for a physician to serve as Consultant to the Board and its Impaired Professioals Program. Individual must have experience in addictionology and hold or be eligible for Florida medical license (will be required to obtain Florida license within reasonable time period). Additional information and application may be obtained from the Florida Board of Medical Examiners, 130 North Monroe St., Tallahassee, FL 32301, Telephone - (904) 488-0595.

PHYSICIAN: Florida State Tuberculosis Control Program. Central Florida location. Available October 1983. 40 hr/wk, salary and benefits. Experience in public health and/or pulmonary diseases desirable. Reply: Clifford H. Cole, M.D., P.O. Box 210, Jacksonville, FL 32231. (904) 354-3961.

POSITION OPEN FOR FULL TIME STAFF ANESTHESIOLOGIST at University Hospital/JHEP, Jacksonville, Florida. Board certified or eligible. Florida license required. Interest in teaching and participation in educational program. Subspecialty in obstetrical, pediatric, anesthesia or intensive care desirable. Call (904) 350-6595 or write: University Hospital of Jacksonville, 655 West 8th Street, Jacksonville, FL 32209.

INTERNAL MEDICINE/ FAMILY PRACTICE: Excellent full time immediate opportunities for Board Eligible or Certified Internists and Family Practitioners to join HMO setting in Southeast Florida. Excellent compensation package. Please respond with CV to: Fern Blum, EMSA, 8200 W. Sunrise Blvd., Bldg. C, Plantation, FL 33322 or call (305) 472-6922.

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CENTRAL FLORIDA Community hospital seeking board certified Pediatrician with Florida license to establish solo private practice. Submit resume to C-1163, P.O. Box 2411, Jacksonville, FL 32203.

FAMILY PRACTICE PHYSICIAN: Hallandale, Florida. Florida licensed, ABEP eligible/ certified, to join established Family Practice physician. Terms negotiable, partnership available. Contact: Mr. Tuyn, (305) 458-0100.

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RHEUMATOLOGIST/INTERNIST, university trained, B.E. 7/84, seeks position on Fla. West Coast. Reply: C-1153, P.O. Box 2411, Jacksonville, FL 32203.

PATHOLOGIST, Florida licensed, certified AP-CP, 20 yrs. experience wishes relocation in Florida from northern climate for additional two decades of active practice. Write: Apt. 1702, 333 E. Ontario Street, Chicago, Illinois. Phone: (312) 944-7653, nights.

ADULT PSYCHIATRIST wants to relocate in Florida. Wants to buy practice from a retiring or relocating psychiatrist. Any location. May consider partnership. Please call: (314) 227-9015.

RADIOLOGIST: BOARD CERTIFIED, trained in east, seeks partnership with multi-service practice group. Reply: C-1157, Post Office Box 2411, Jacksonville, FL 32203.

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MIAMI BEACH, FLORIDA: Multi-specialty medical practice. All equipment, including x-ray; fully staffed. $40,000. Call: (305) 531-5545.

INTERNAL MEDICINE/ FAMILY PRACTICE for immediate sale: Located on Florida's West Coast near Tampa. Terms negotiable. Gross 1st 6 months of 1983 over $100,000. Call or write Michael Maskaron, M.D., 702 Lafayette St., New Port Richey, FL 33552, (813) 847-3680.

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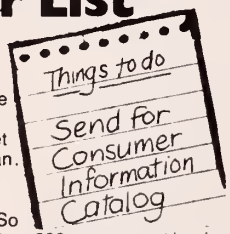
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FULLIFE, c/o Hartje Stress Clinic, 2429 University Blvd., W., Jacksonville, FL 32217, (904) 733-3240.

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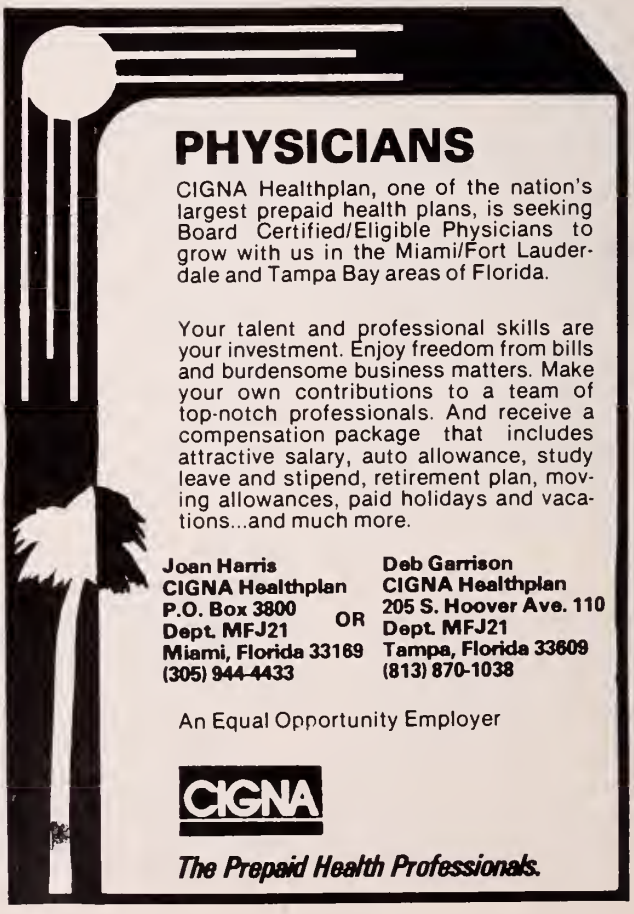
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There are other important benefits with Valium as well—along with its broad clinical range, Valium has an efficacy/safety profile that few, if any, drugs can match. This record has been achieved with extensive clinical experience, undoubtedly including yours. And, as you must have observed, side effects more serious than drowsiness, fatigue or ataxia rarely occur. Nevertheless, as with any CNS-acting agent, patients should be cautioned about driving, operating hazardous machinery or ingesting alcohol or other CNS-depressant drugs while taking Valium.

Yet another benefit Valium affords is flexibility. Available in 2-mg, 5-mg and 10-mg scored tablets, Valium enables you to titrate dosage to individual patient needs. For the geriatric patient, a starting dosage of 2 to 2½ mg once or twice a day is recommended. And, for patients who forget or skip medication, you can prescribe Valrelease™ (diazepam/Roche) 15-mg slow-release capsules, knowing that Valrelease will assure all the benefits of Valium 5 mg *t.i.d.* with the convenience of once-a-day dosage.

Discontinuation of Valium (or Valrelease) is typically as smooth as its start in short-term therapy. However, Valium and Valrelease should be discontinued gradually after more extended treatment. As you diminish dosage, the built-in tapering action of Valium and Valrelease will help avoid rapidly recurring anxiety symptoms and symptoms of withdrawal, and will help ease the patient's transition to independent coping when therapeutic goals have been achieved.

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For a summary of product information, please turn the page.

ROCHE®

Valium® (diazepam/Roche) Ⓝ Tablets
Valrelease™ (diazepam/Roche) Ⓝ slow-release Capsules
Injectable Valium® (diazepam/Roche) Ⓝ

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, impending or acute delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in: relief of skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome. *Oral forms* may be used adjunctively in convulsive disorders, but not as sole therapy. *Injectable form* may also be used adjunctively in: status epilepticus; severe recurrent seizures; tetanus; anxiety, tension or acute stress reactions prior to endoscopic/surgical procedures; cardioversion.

The effectiveness of diazepam in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindications: Tablets or capsules in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

> ***Usage in Pregnancy:*** **Use of minor tranquilizers during first trimester should almost always be avoided because their use is rarely a matter of urgency and because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

ORAL Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral forms adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

INJECTABLE *To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling and, rarely, vascular impairment when used I.V.: inject slowly, taking at least one minute for each 5 mg (1 ml) given, do not use small veins, i.e., dorsum of hand or wrist; use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Injectable Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.*

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest; concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea; have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence; can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects — particularly with known compounds which may potentiate action of diazepam, *i.e.*, phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed and tolerated)

The clearance of diazepam and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

INJECTABLE Although promptly controlled, seizures may return; readminister if necessary; not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures; use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated.

Adverse Reactions: Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, observed in patients during and after diazepam therapy are of no known significance.

INJECTABLE Venous thrombosis/phlebitis at injection site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia.

In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

Dosage: Individualize for maximum beneficial effect.

ORAL *Adults:* Anxiety disorders, relief of symptoms of anxiety—Valium (diazepam/Roche) tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 Valrelease capsules (15 to 30 mg) daily. Acute alcohol withdrawal—tablets, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; or 2 capsules (30 mg) the first 24 hours, then 1 capsule (15 mg) daily as needed. Adjunctively in skeletal muscle spasm—tablets, 2 to 10 mg t.i.d. or q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily. Adjunctively in convulsive disorders—tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily.

Geriatric or debilitated patients: Tablets—2 to 2½ mg 1 or 2 times daily initially, increasing as needed and tolerated (see Precautions). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose.

Children: Tablets—1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use in children under 6 months). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose (not for use in children under 6 months)

INJECTABLE Usual initial dose in older children and adults is 2 to 20 mg I.M. or I.V., depending on indication and severity. Larger doses may be required in some conditions (tetanus). In acute conditions injection may be repeated within 1 hour, although interval of 3 to 4 hours is usually satisfactory. Lower doses (usually 2 to 5 mg) with slow dosage increase for elderly or debilitated patients and when sedative drugs are added. (See Warnings and Adverse Reactions.)

For dosages in infants and children see below; have resuscitative facilities available.

I.M. use: by deep injection into the muscle.

I.V. use: inject slowly, take at least one minute for each 5 mg (1 ml) given. Do not use small veins, i.e., dorsum of hand or wrist. Use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.

Moderate anxiety disorders and symptoms of anxiety, 2 to 5 mg I.M. or I.V., and severe anxiety disorders and symptoms of anxiety, 5 to 10 mg I.M. or I.V., repeat in 3 to 4 hours if necessary; acute alcohol withdrawal, 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary. Muscle spasm, in adults, 5 to 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary (tetanus may require larger doses); in children *administer I.V. slowly*; for tetanus in infants over 30 days of age, 1 to 2 mg I.M. or I.V., repeat every 3 to 4 hours if necessary; in children 5 years or older, 5 to 10 mg repeated every 3 to 4 hours as needed. Respiratory assistance should be available.

Status epilepticus, severe recurrent convulsive seizures (I.V. route preferred), 5 to 10 mg adult dose administered slowly, repeat at 10- to 15-minute intervals up to 30 mg maximum. Repeat in 2 to 4 hours if necessary, keeping in mind possibility of residual active metabolites. Use caution in presence of chronic lung disease or unstable cardiovascular status. Infants (over 30 days) and children (under 5 years), 0.2 to 0.5 mg slowly every 2 to 5 min., up to 5 mg (I.V. preferred). Children 5 years plus, 1 mg every 2 to 5 min., up to 10 mg (slow I.V. preferred); repeat in 2 to 4 hours if needed. EEG monitoring may be helpful.

In endoscopic procedures, titrate I.V. dosage to desired sedative response, generally 10 mg or less but up to 20 mg (if narcotics are omitted) immediately prior to procedure; if I.V. cannot be used, 5 to 10 mg I.M. approximately 30 minutes prior to procedure. As preoperative medication, 10 mg I.M.; in cardioversion, 5 to 15 mg I.V. within 5 to 10 minutes prior to procedure. Once acute symptomatology has been properly controlled with injectable form, patient may be placed on oral form if further treatment is required.

Management of Overdosage: Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure; employ general supportive measures, I.V. fluids, adequate airway. Use levarterenol or metaraminol for hypotension. Dialysis is of limited value.

How Supplied:

ORAL: Valium scored tablets — 2 mg, white; 5 mg, yellow; 10 mg, blue — bottles of 100 and 500; Prescription Paks of 50, available in trays of 10; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25 and in boxes containing 10 strips of 10.

Valrelease (diazepam/Roche) slow-release capsules — 15 mg (yellow and blue), bottles of 100, Prescription Paks of 30.

INJECTABLE Ampuls, 2 ml, boxes of 10; Vials, 10 ml, boxes of 1; Tel-E-Ject® (disposable syringes), 2 ml, boxes of 10. Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buffers, and 1.5% benzyl alcohol as preservative.

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Heart Healthy Recipe

BEEF STROGANOFF

1 pound beef tenderloin, lean beef round or sirloin
freshly ground black pepper
½ pound mushrooms, sliced
1 onion, sliced
3 tablespoons oil
3 tablespoons flour
2 cups beef broth
2 tablespoons tomato paste
1 teaspoon dry mustard
¼ teaspoon oregano
¼ teaspoon dill weed
2 tablespoons sherry
⅓ cup low-fat yogurt

Remove all visible fat from the meat and cut into thin strips, about 2 inches long. Sprinkle with pepper and let stand in a cool place for 2 hours.

In a heavy skillet, sauté mushrooms in oil until tender. Remove from skillet, and sauté onions in the same oil until brown. Remove from skillet.

Brown meat quickly on all sides until rare. Remove and set aside.

Blend the flour into the oil in the skillet and gradually add the broth, stirring constantly until smooth and slightly thick. Add the tomato paste, dry mustard, oregano, dill weed and sherry. Blend well. Combine the sauce with the meat, mushrooms and onions in the top of a double boiler. Cook for 20 minutes. Beat yogurt (to prevent it from curdling). Blend in the beaten yogurt 5 minutes before serving.

Yield: 6 servings
Approx. cal./serv.: 275 (or 375 with ½ cup rice or pasta)

Heart Healthy Recipes are from the Third Edition of the American Heart Association Cookbook. Copyright © 1973, 1975, 1979 by the American Heart Association, Inc.

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*Shils ME, Randall HT. Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME; Philadelphia, Lea & Febiger, 1980, p. 1084.

Please see summary of product information on reverse page

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THE MULTIVITAMIN/MINERAL FORMULATION



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INDICATIONS: Prophylactic or therapeutic nutritional supplementation in physiologically stressful conditions, including conditions causing depletion, or reduced absorption or bioavailability of essential vitamins and minerals, certain conditions resulting from severe B-vitamin or ascorbic acid deficiency, or conditions resulting in increased needs for essential vitamins and minerals.

CONTRAINDICATIONS: Hypersensitivity to any component.

WARNINGS: Not for pernicious anemia or other megaloblastic anemias where vitamin B_{12} is deficient. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with vitamin B_{12} deficiency who receive supplemental folic acid and who are inadequately treated with B_{12}.

PRECAUTIONS: *General.* Certain conditions may require additional nutritional supplementation. During pregnancy, supplementation with vitamin D and calcium may be required. Not intended for treatment of severe specific deficiencies. *Information for the Patient.* Toxic reactions have been reported with injudicious use of certain vitamins and minerals. Urge patients to follow specific dosage instructions. Keep out of reach of children. *Drug and Treatment Interactions.* As little as 5 mg pyridoxine daily can decrease the efficacy of levodopa in the treatment of parkinsonism. Not recommended for patients undergoing such therapy.

ADVERSE REACTIONS: Adverse reactions have been reported with specific vitamins and minerals, but generally at levels substantially higher than those in Berocca Plus. However, allergic and idiosyncratic reactions are possible at lower levels. Iron, even at the usual recommended levels, has been associated with gastrointestinal intolerance in some patients.

DOSAGE AND ADMINISTRATION: Usual adult dosage: one tablet daily. Not recommended for children. Available on prescription only.

HOW SUPPLIED: Golden yellow, capsule-shaped tablets — bottles of 100.

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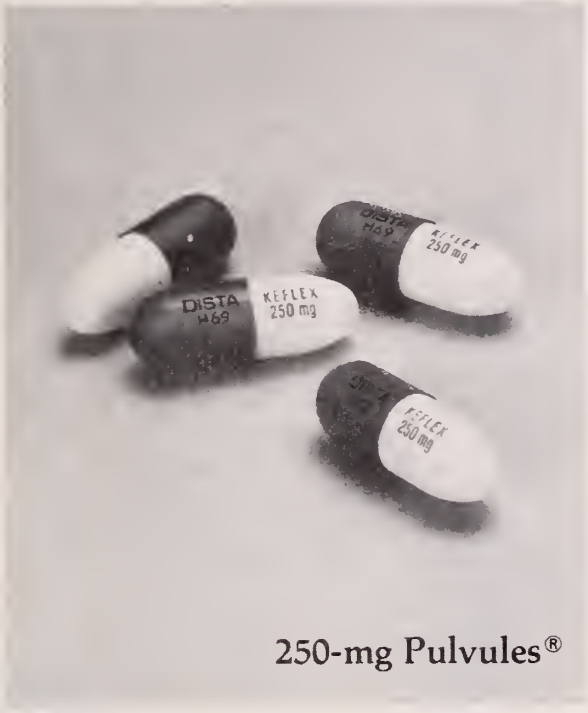
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- Studied in over 200 clinical trials involving over 10,000 patients.[13]
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- Contraindicated in patients who are pregnant or hypersensitive to flurazepam.
- Caution patients about drinking alcohol, driving or operating hazardous machinery during therapy.



References: 1. Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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A single tablet eradicates pinworm in 95% of patients.

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Please see complete Prescribing Information on adjacent page.

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Vermox Tabs #4
Sig 1 tab each family member



DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 μg/ml and 0.09 μg/ml, respectively.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5%-100%)	–	–

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

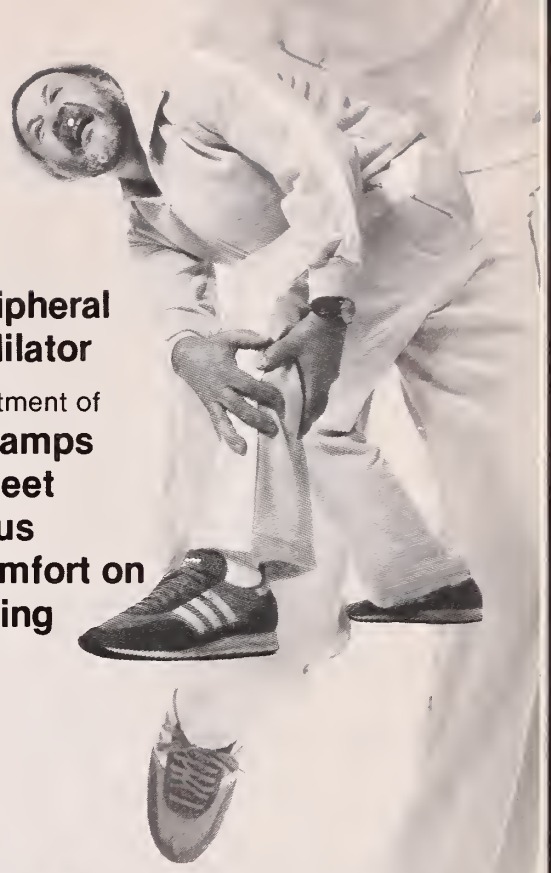
HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium.

US Patent 3,657,267
December 1979

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Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

LIPO-NICIN®/100 mg.

Each blue tablet contains:
Nicotinic Acid 100 mg.
Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 5 tablets daily.
AVAILABLE: Bottles of 100, 500.

Indications: For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

Side Effects: Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

Contraindications: Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

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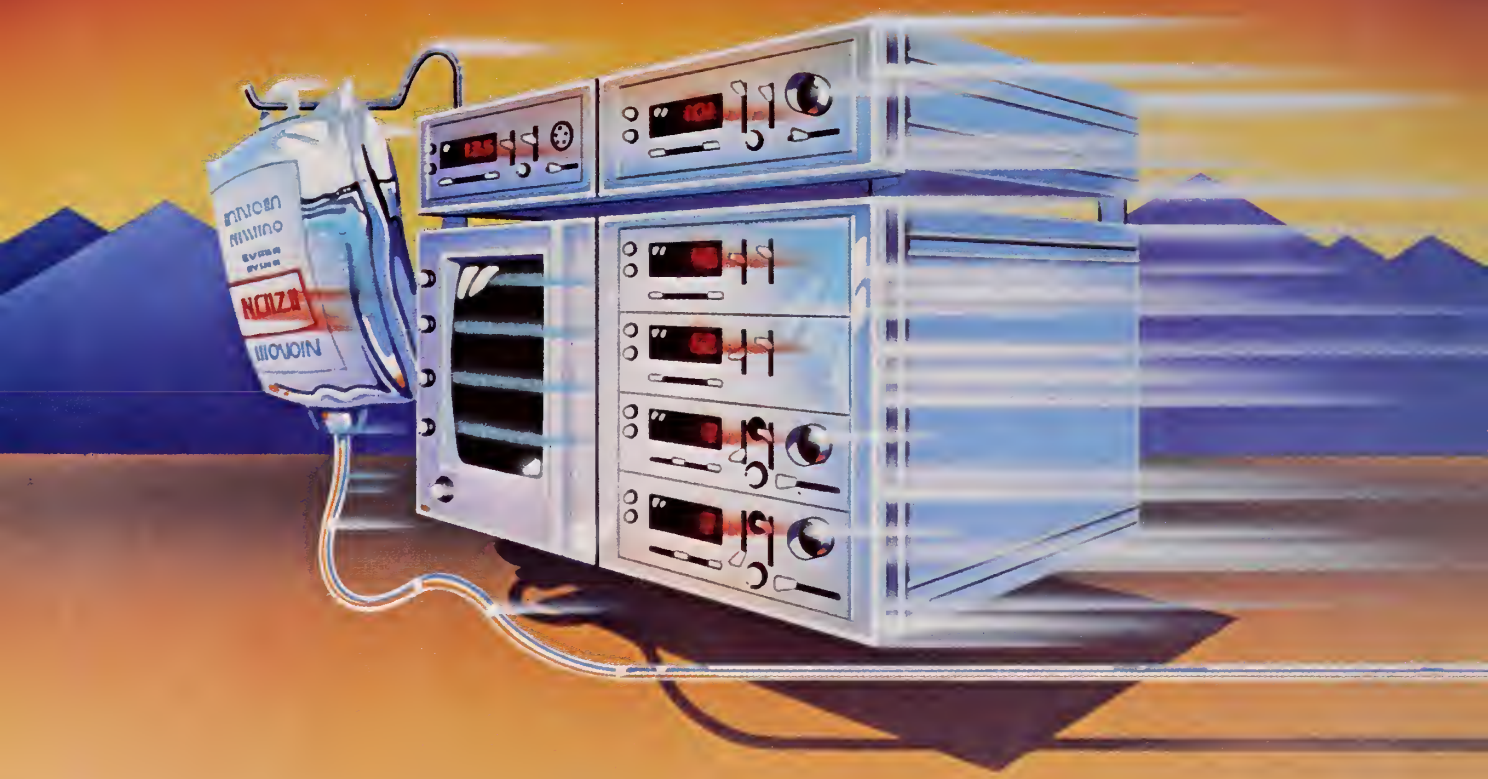
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PRESIDENT'S PAGE

Florida cares about mothers and children

"The Child is the Father of man."

William Wordsworth
My Heart Leaps Up



Lewis Barness, M.D., the Guest Editor and the other contributing authors are to be congratulated on the excellent September special issue of *The Journal of the Florida Medical Association, Inc.*, on perinatology. This important issue provides the opportunity for comment and recognition of the special and valuable leadership of organized medicine and the concern and response of medicine to one very critical area of health care to the public.

Recognizing the importance of centralized community or regionalized perinatal intensive care, the American Medical Association's House of Delegates in June, 1971, adopted a statement calling for the application of scientific knowledge and skills to reduce maternal and infant mortality. The goals of such programs were early identification of the high-risk pregnancy and infant in sufficient time to allow transfer to a more appropriately equipped facility.

The American Medical Association recognized that the implementation of centralized community or regionalized perinatal programs is a responsibility of physicians, government and the public.

In 1974, the Florida Legislature with the help of pediatricians and obstetricians throughout the state, appropriated funds for five regional neonatal intensive care centers. The centers were to provide neonatal intensive care and developmental follow-up. Through Florida Statute 383.15-21, enacted in 1976, the Regional Perinatal Centers Program gained statutory basis. By 1977, high-risk obstetric service was included and funding for ten perinatal centers, distributed around the state, was provided.

By 1983, with the ten perinatal centers designated and active, the state of Florida is realizing the value of its investment, which this year is twenty-six and a half (26.5) million dollars. Infant mortality has been reduced from 13.6/1000 live births in 1961 to 8.0/1000 live births in 1981. Survival for the low birth weight infant has dramatically improved and the long-term developmental delay has been reduced through the combined efforts of the disciplines of obstetrics, neonatology and developmental specialists. Further improvement is on the horizon as newer technology and concepts are applied to the care of the mother and infant.

The transport system, an important component of the program, provides necessary access to the centers from the community for the acutely ill mother or infant. At the same time, the two-way transport system enables the patient to return closer to home base when intensive care is no longer needed but futher hospitalization is necessary. Funding for such step-down care has also been appropriated.

Through this program, every citizen in Florida gains. For the poor, it provides the needed financial support. For everyone, it provides skillful and timely intensive care at centers that are adequately monitored in activities and results. For their health care providers, its educational outreach program allows for dialogue between the centers and the community for overall improved patient care throughout the state.

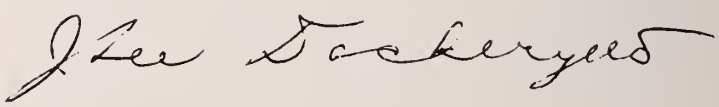
Through this state appropriation, the Florida Legislature has shown they care about their constituents. The insurance industry, in providing catastrophic maternity coverage has recognized the value

of such financial relief for subscribers to have access to perinatal centers. "First day" coverage by Florida Medicaid has eliminated an important obstacle to the access and utilization of the perinatal facilities and care for the indigent and underprivileged. These have been worthwhile investments in terms of improved outcome and dollar savings. Everyone involved in its activities, especially participating physicians and other health care providers, must be congratulated, for without their cooperation the program could not succeed. The directors and staff of Children's Medical Services' Division of Health and Rehabilitative Services, the designated administrators of this program and the State Perinatal Advisory Council members should be applauded for their foresight in the development of this program and their continued efforts at making it the very best in the nation.

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CONTRAINDICATIONS: Hypersensitivity to any of the components, concurrent MAO inhibitor therapy, severe hypertension, bronchial asthma, coronary artery disease, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction. Do not use in children under 12 years.

Do not use this drug in patients with narrow-angle glaucoma, obstructive or paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrage, severe ulcerative colitis, toxic megacolon complicating ulcerative colitis, myasthenia gravis. Do not use in nursing mothers.

Use in treating lower respiratory tract symptoms, including asthma, is contraindicated.

WARNINGS: Caution patients about activities requiring alertness (e.g., operating vehicles or machinery). Antihistamines are more likely to cause dizziness, sedation, and hypotension in elderly patients. Patients should also be warned about the possible additive effects of alcohol and other CNS depressants.

Usage in pregnancy: Safe use in pregnancy has not been established. Use only when the potential benefits have been weighed against the possible hazards to the mother and child. Note that an inhibitory effect on lactation may occur.

PRECAUTIONS: Use with caution in patients with a history of bronchial asthma, increased intraocular pressure, hyperthyroidism, cardiovascular disease, hypertension, hiatal hernia with reflux esophagitis, intestinal atony of the elderly or debilitated intestinal obstruction, myasthenia gravis, renal function impairment, and ulcerative colitis (severe).

Drug Interactions: MAO inhibitors, Alcohol or CNS depressants, especially anesthetics, barbiturates, and narcotics.

ADVERSE REACTIONS: Prolongs the response to nervous stimulation, potentiates the response to norepinephrine, and inhibits the response to tyramine.

Slight to moderate drowsiness occurs relatively infrequently with Chlorpheniramine Maleate. Other possible side effects common in antihistamines in general include perspiration, chills, dryness of mouth, nose and throat.

Cardiovascular System: Hypotension, headache, palpitations, tachycardia, extrasystoles.

Hematologic System: Hemolytic anemia, thrombocytopenia, agranulocytosis.

Nervous System: Sedation, dizziness, disturbed coordination, fatigue, confusion, restlessness, excitation, nervousness, tremor, irritability, insomnia, euphoria, paresthesias, blurred vision, diplopia, vertigo, tinnitus, acute labyrinthitis histeria, neuritis, convulsions.

Gastrointestinal System: Epigastric distress, anorexia, nausea, vomiting, diarrhea, constipation.

Genitourinary System: Urinary frequency, difficult urination, urinary retention, early menses.

Respiratory System: Thickening of bronchial secretions, tightness of chest and wheezing, nasal stuffiness.

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Treatment: The patient should be induced to vomit, even if emesis has occured spontaneously. Vomiting by the administration of ipecac syrup is a preferred method. However, vomiting should not be induced in patients with impaired consciousness. Stimulants (analeptic agents) should not be used. Vasopressors may be used to treat hypotension. Short-acting barbiturates, diazepam or paraldehyde may be administered to control seizures. Hyperpyrexia, especially in children, may require treatment with tepid water sponge baths or a hypothermic blanket. Apnea is treated with ventilatory support.

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Thermography

Pain, as described by our patients, has always been an extremely subjective thing, as compared to those objective findings we can measure and appreciate with our senses. We have always had to take the patient's word, his description of his pain, and have never had an objective way of measuring that pain.

Contact thermography, a relatively new technique, potentially offers the possibility of correlating the patients complaints with an objective test. Thermography is based upon the fact that liquid crystals of cholesterol derivation selectively reflect polarized light in a narrow region of wave length. The strong molecular rotary power and specific color temperature responses are utilized in the technique of color thermography.

This technique has been pounced upon by many individuals at the periphery of medicine and there has been a great deal of suspicion that this is yet another questionable test which can be abused. However, a good many legitimate investigators have been studying this technique and are reporting increasingly in the literature their results. We can make a few conclusions about this new technique.

Based upon the fact that areas of the body, that is dermatomes, effected by nerve root irritation generally have skin slightly cooler, it can be anticipated that a person with a real irritation of nerve root will demonstrate lower temperature in that dermatome as compared to the surrounding dermatomes and as compared to the opposite side. The two findings in thermography that may be helpful to practitioners include the absolutely negative thermogram in a patient who describes symptoms which cannot be explained on any objective basis; and the similar patient whose thermogram does indeed show a decreased temperature in the specific dermatome or dermatomes in question. In the latter case, although the positive test certainly may not be the basis for proceeding with aggressive treatment, such as surgery, it certainly does lend some credence to the patient's complaints and may even result in a decision that this patient, indeed, does have some objective evidence for permanent partial impairment in some cases. In other words, it may suggest that this patient's symptoms are not entirely psychiatric.

While thermography has been accepted as evidence in some courts in the State of Florida, it remains to be seen whether the technique will survive as a viable addition to the diagnostic armamentarium of practicing physicians.

James F. Richards Jr., M.D.
Orlando

The more things change, the more they remain the same

Spawned by Congress over a decade ago, Professional Standard Review Organizations (PSROs) are rapidly approaching a terminal state. Never particularly popular with physicians for sacrificing quality assurance to cost containment, or with government officials because of inadequate control, PSROs were accepted as an unnecessary intervention by the government and reluctantly supported by the medical profession as an obligation to assure quality of care to Medicare patients. Over the years, cries have arisen to abolish the program because of accusations that the privacy of physicians and patients was invaded, the 1st, 5th, 7th and 9th amendments to the U.S. Constitution were violated, and savings-to-cost ratios were poor.

Replacing the PSROs will be a new prospective pricing plan allegedly designed to save money without reducing the quality of care hospitals give the elderly and indigent. Created by the same law that developed the new Diagnosis Related Groups (DRGs), no hospital can receive Medicare payments after October 1, 1984, unless a Peer Review Organization (PRO) reviews the care given. Contract bids by the new PROs are now being evaluated on a point system emphasizing objections aimed at controlling hospital admissions, data collection and experience plus quality of the managing personnel and those reviewing care. Seemingly, this plan is designed to prevent certain types of behavior by hospitals to enhance payment under the new DRGs and to hold down or reduce hospital admissions, something the DRGs appear to give an incentive to hospitals to increase. While such tactics appear to have only cost implications, the prospective PRO must demonstrate its intention to monitor quality of care as well.

Regulations including confidentiality, sanctions and conduct of review are yet to be published. PROs will be entitled and mandated to develop criteria for determining the norms of care against which cases hospitals and physicians will be measured. Could friendship, professional jealousy, hospital affiliation or medical politics rear an ugly head? While historically, organizations have difficulty in policing themselves, yet for the future independence of our profession and for the economic good of our country, we must strive to see that PROs maintain high quality medical care and lower its cost.

In his inaugural address at the June annual AMA meeting, Frank J. Jirka Jr., M.D., brought up to respect "individual physicians who recognized they not only had a compact with each patient, but through our profession, a compact with the American people," said, "What the nation must have is appropriate effective care in appropriate cost effective settings." An impossible dream? Our nation's oldest military organization has a slogan, "The difficult we do immediately, the impossible takes a little longer."

Would anyone object to us borrowing that slogan?

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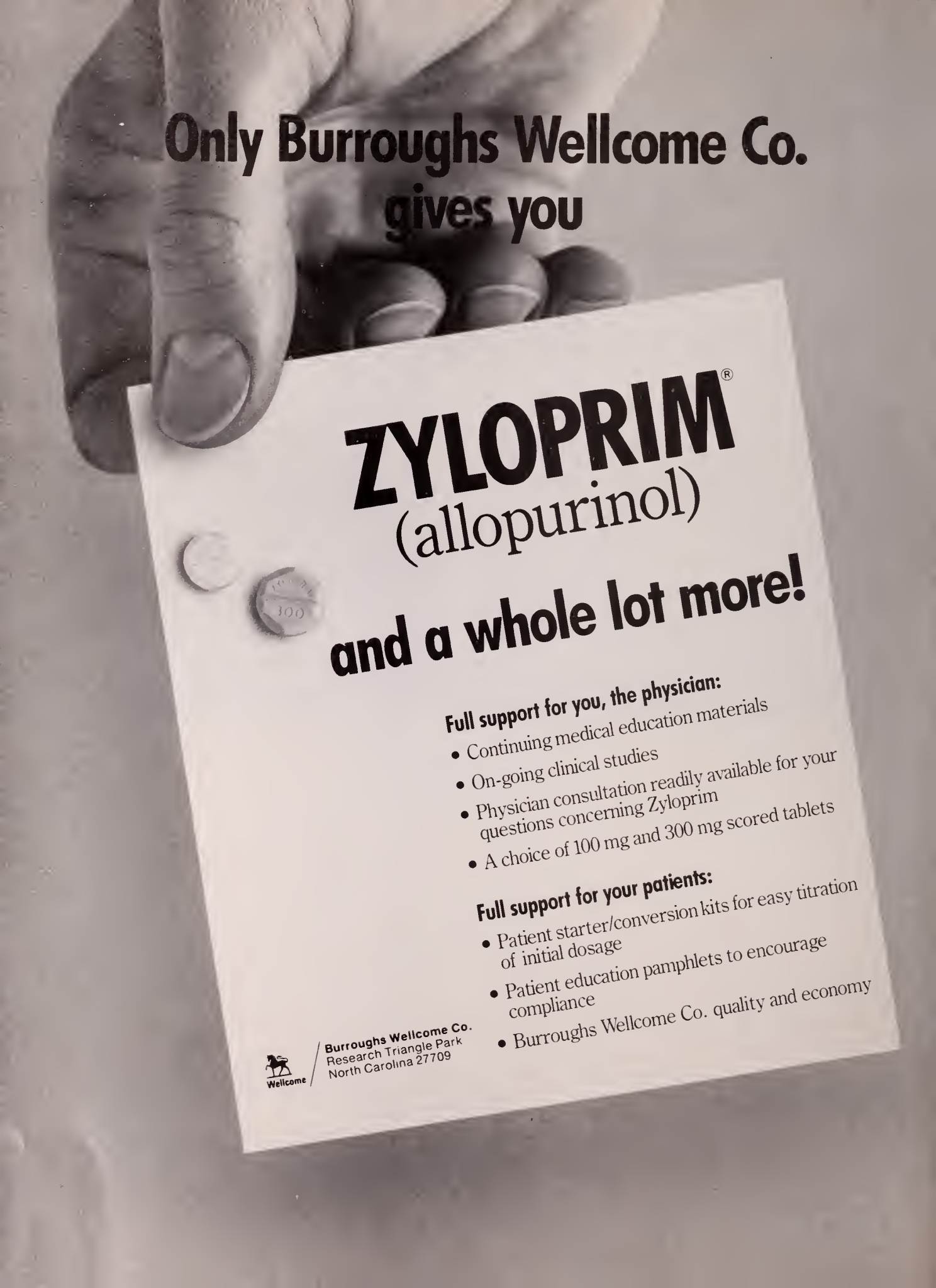
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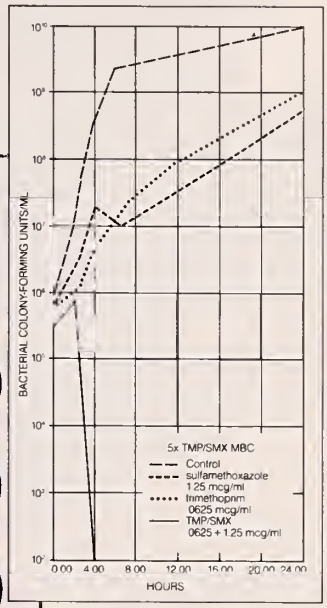
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cephalexin†	81% 343,339	85% 67,031	92% 67,027	16% 4398	80% 4365	22% 1834	13% 7571	12% 11,846
nitrofur-antoin	97% 307,785	65% 61,162	7% 59,775	13% 3848	14% 3059	67% 1707	60% 7109	67% 10,830

†Analogous to cephalothin, the primary antibiotic disc used in testing.
Source: The Bacteriologic Report, BAC-DATA Medical Information Systems, Inc., Winter Series, 1981-82.
Numbers under percentages refer to the projected number of isolates tested.

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Bactrim™ DS

(trimethoprim and sulfamethoxazole/Roche)

b.i.d. *for recurrent urinary tract infections*

**In vitro* data do not necessarily predict clinical results.

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See next page for references and a summary of product information.

References: **1.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kramer MJ, Mauriz YR, Robertson TL, Timmes MD: Morphological studies on the effect of subinhibitory and inhibitory doses of sulfamethoxazole-trimethoprim combination on *Escherichia coli*. Presented at the 12th International Congress of Chemotherapy, Florence, Italy, Jul 19-24, 1981. **3.** Spicehandler J *et al: Rev Infect Dis 4*:562-565, Mar-Apr 1982. **4.** Stamey TA: *Pathogenesis and Treatment of Urinary Tract Infections*. Baltimore, Williams & Wilkins, 1980, p. 13. **5.** Ronald AR: *Clin Ther 3*:176-189, Mar 1980. **6.** Cooper J, Brumfitt W, Hamilton-Miller JMT: *J Antimicrob Chemother 6*:231-239, 1980. **7.** Gower PE, Tasker PRW: *Br Med J 1*:684-686, Mar 20, 1976. **8.** Cosgrove MD, Morrow JW: *J Urol 111*:670-672, May 1974. **9.** Iravani A *et al: Antimicrob Agents Chemother 19*:598-604, Apr 1981. **10.** Schaeffer AJ, Flynn S, Jones J: *J Urol 125*:825-827, Jun 1981. **11.** Rous SN: *J Urol 125*:228-229, Feb 1981. **12.** BAC-DATA Medical Information Systems, Inc., Bacteriologic Reports, Winter Series, 1976-82.

Bactrim™ DS

(trimethoprim and sulfamethoxazole/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, hepatocellular necrosis, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients. *Pregnancy:* Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, hepatocellular necrosis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

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Electronic thermography

Joseph V. Uricchio Jr., M.D.

ABSTRACT: Though a test with ancient medical origins, thermography has only recently demonstrated growing popular interest and application to medical diagnosis and patient care. Electronic thermography presently provides the only objective indication of sensory nerve fiber insult and can aid considerably in the management of complicated neurologic and musculoskeletal conditions.

Still felt controversial by many, thermography can add a new dimension of understanding to patient complaints. It does not show pain since that is a complicated psychosocial and neurophysiologic response. But it can show sensory nerve fiber involvement, the presence or absence of which can allow for a strong medical statement as to pain behavior.

The technique of electronic thermography is explained and various clinical applications demonstrated. As an adjunctive device in company with other established diagnostic tests it enlarges our scope of comprehension in medical as well as medicolegal clinical situations. Statistics in this reported series of patients show that the thermogram can give well above 80% direct predictive correlation with myelographic findings. At least a working knowledge of this procedure is recommended for all practitioners.

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Over the past several years, there has been a marked resurgence of interest in thermography as a diagnostic aid. Since Hippocrates applied mud to the bodies of his patients in 400 BC and noted that it dried at different rates on different parts depending on underlying pathology, the process of documenting variations in skin temperature as a manifestation of injury or disease has evolved from such crude mechanisms through starch-iodine tests and surface-applied liquid crystals to the present state of electronic thermographic technology. With less sophisticated equipment being used, this procedure enjoyed considerable enthusiasm and attention during the 1960s and early 1970s, drew muddled disenchantment for several years when it was thought not to be helpful in evaluating breast cancer, and has steadily increased in recognition recently, spearheaded by the investigations and writings of Dr. Charles Wexler, a California radiologist, and others.

Based on the technical advances contributed by electronic surveillance hardware from the Vietnam war years, many pertinent articles have appeared in the medical literature and acceptance of thermography as a medical and medicolegal tool is rapidly growing. At various teaching centers it is being used and investigated as a tool for stroke prediction, diagnosis of migraine headache mechanism, superficial vascular abnormalities, progression of ischemic limb disease and to monitor the progress of peripheral arthritic changes. Its use in multimodality breast screening clinics has added a greater degree of predictability in cancer studies.

Some of its most practical and useful applications have involved diagnostic screening for nerve root irritation, peripheral nerve injuries, reflex sympathetic dystrophy or causalgia, and musculoskeletal soft tissue syndrome. It has become very informative in the day-to-day treatment of cervicothoracic and lumbosacral strains as well as their compensation and liability implications. In deposition and trial circumstances it presents as a colorful

and dramatic picture when demonstrating either pathology or normal findings.

Thermography is presently the best and most informative objective test to corroborate or rule out a patient's subjective complaints accompanying syndromes of nerve root irritation, peripheral nerve insult, or paravertebral soft tissue injury. It is the only test giving practical objective information about sensory nerve fiber involvement. As such, knowledge of the test and its indications should be readily available to all practitioners dealing with these conditions. In keeping with its relatively recent availability on the modern medical diagnostic scene, controversy exists as to its scientific basis, indications for use and interpretation. This article should provide some understanding of the present state of this imaging technique. Offhanded rejection or thoughtless disregard of the procedure without any experience or information seems unscientific and inappropriate.

Method • The human body emits a heat pattern from its surface topography which has been accepted as symmetrical in the normal state. Any pressure or irritation on a nerve root fiber or peripheral nerve fiber can produce changes thought to be mediated on the basis of sympathetic nerve over-activity. It is believed that such activity leads to vasoconstriction and, therefore, decreased heat emission along the course of the nerve or nerve root affected. As might be expected, sensory nerve fibers appear to be more delicate and subject to various kinds of alteration in function. Subtle changes in the heat emission pattern can be detected in them even when there are no motor changes determined by EMG. Such changes are commonly found quite closely adhering to the distribution of a peripheral nerve, if that is the structure involved, or in a dermatome distribution should it be a nerve root which is affected. Reflex sympathetic dystrophy or causalgia would naturally reflect itself in a more localized or circumferential pattern about a limb or give readings as though many different nerve roots were involved.

Presently, this thermographic pattern of the body's heat emission can be detected and measured by two different methods. Many current articles have been based upon studies using small inflated pillows with rubberized surface in which are embedded cholesteric liquid crystals. The pillow surface is pressed against the part to be examined, adheres closely to body configuration, changes the color of its embedded crystals in response to the body's temperature and is recorded by a Polaroid picture of the pillow surface which retains the colored image for many seconds. Temperature gradations are read according to a standard color scale and interpretation based on dermatome distribution or other factors. A matched set of pillows with varying ranges of heat sensitivity is required. This mechanism is quite accurate and versatile. The pillows are easily carried about from room to room or in a hospital setting. They give excellent and detailed information and do not require complicated technical skill for application. The multiple sets of Polaroid pictures can then be interpreted by a trained thermographist to arrive at the appropriate diagnostic impression.

Similar information is provided in a more comprehensive and dramatic fashion by electronic thermography. An infrared camera encloses oscillating mirrors and prisms as well as tiny temperature-sensitive chips cooled by liquid nitrogen to -321 F. This camera senses the body image in brightly colored patterns covering the entire visible surface. These are transmitted to a TV monitor and 35 mm slides are taken with the patient in certain proscribed positions so that all areas of nerve root involvement can be visualized. The slides are mounted in sequences for interpretation and the TV image stored on tape for future retrieval if desired. The slides give a more highly detailed picture over entire areas of the body rather than the smaller representative patches seen with the liquid crystal thermogram. Electronic thermography probably allows for more subtle interpretation because so much more of the body surface is measured and documented at any one time. The machine, however, is fairly cumbersome and quite a bit more expensive than the liquid crystal pillows used in contact thermography.

Technique • For electronic thermography, the patient removes all clothing from the area to be examined. If this involves the low back and lower extermities, the test must be done with the patient nude or wearing a G-string. Room temperature tap water is used to lightly cleanse the area to be tested which is then blown dry with a hair dryer on cool setting. The patient is allowed to equilibrate for 15-20 minutes in the atmosphere of the testing room, which should be draft-free. While the constant temperature of the room is not specifically important, it should be warm enough so that the patient is not shivering and cool enough so that he is not sweating.

All distracting influences are minimized. The patient should not wear a corset, collar, TNS unit or similar apparatus for a number of hours prior to examination. EMG studies should not be done within 24 hours prior to a thermogram. Though the effects of nicotine and ingested medication would reasonably be expected to be symmetrical, the patient is discouraged from smoking or from taking any unimportant medications for at least eight to twelve hours prior to the test.

The thermographic pictures are taken of the area desired in a series of set poses designed to show areas of dermatome distribution in the extremities,

the posterior aspects of the spinal segments involved and the digits in detail. The test is then repeated twice more at 20 minute intervals with the patient remaining in the cooling room at constant temperature.

Problems with artifact seem minimal. Even if a patient pinches or rubs or slaps himself, this skin change dissipates after 2-3 minutes, and the patient is under the direct observation of a technician for 10-15 minutes at a time. Should there be any unusual thermographic change not easily explicable on a nerve root or peripheral nerve basis, or if the change is not persistent through the three sets of films, the test in negated and the patient returns several days later for retest. It is felt highly unlikely that anyone can consistently produce an artifact in a dermatome distribution exactly similar on three separate occasions.

Patterns of asymmetry are read with an eye toward dermatome distribution, though they can be seen as local manifestations of peripheral nerve or soft tissue injury. In the extremities, the neuropathologic changes are usually cold. However, for some reason not fully understood, the peripheral changes in the extremities may be hot in 7-10% of cases. In the affected areas of the neck and low back, either from muscular changes mediated by posterior circumflex branches of the nerve root or by local myofascial response, the changes are usually of increased heat emission.

Black-white thermographic pictures are also taken and certain changes of splaying or focal condensation near termination of the linear heat stripe given by the spinous processes of the lumbosacral region can graphically detect myotome involvement at specific levels there. While details of interpretation are not particularly important to the casual observer, they are critical to the thermographist. Readings are determined by differing heat levels on symmetrical portions of body surface.

Interpretation is not contingent upon certain specific color patterns. The colors can be set in any order desired on any given machine in any office. Red or yellow, for example, do not automatically mean warmth. It depends on the code or legend set in that specific machine and reflected in every picture at the bottom or side of the frame. This tells how that individaul camera was set with each adjacent color representing a one degree centigrade difference. In this manner, each individual picture can be interpreted by the color code shown on that frame itself rather than having to refer to some other master legend.

Case reports • Several case studies will illustrate the usefulness of thermography in routine daily practice. Figures 1-9 on pages 894a-d.

Case 1. — This 28-year-old white male chef had several weeks of severe radiating pain and weakness in his right arm to the point where he often dropped his carving knife. Clinical examination revealed diffuse weakness and decreased muscle tone as well as decreased sensation to pinprick about the volar and ulnar surface of his right forearm and hand. In Figures 1A and 1B, the obvious thermographic changes of decreased heat about the patient's right arm and forearm can be seen. At myelography, a small disc protrusion was detected on the right at the C7-T1 interspace. These figures show the anterior aspect of the patient's upper torso and arms. On his right the darker blue and green reflect the profound nerve fiber irritation on that side. The color-temperature legend for this particular camera can be seen at the bottom right and each adjoining color represents one degree centigrade colder progressing toward the left.

Conservative treatment was suggested, the patient left the hospital, showed fairly rapid and progressive improvement, became almost asymptomatic and regained his strength. He returned to regular gainful employment and normal activities. Figures 1C and 1D were taken approximately ten weeks later when he was asymptomatic. The thermogram has returned to normal symmetry, a striking reflection of the rapid changes in this examination corresponding to the clinical progress.

Case 2. — The 54 year old white male attorney six months before examination fell twice and received significant injuries to the right elbow. He had no treatment and recent x-rays shows displaced fracture of the coronoid process as well as considerable ectopic calcification. He has subjective numbness and tingling diffusely into his fingers. Figure 2A shows the arms and hands from the front. The pinker colors indicating increased heat locally about the lateral aspect of the right elbow reflect the soft tissue changes surrounding the healing fracture. Distally in the right forearm, the greenish tint shows decreased heat indicating significant peripheral nerve fiber involvement. Figure 2B shows the decreased heat about the distal portions of the right and little fingers in darker blue and green, giving the first clinical documentation of this patient's developing ulnar nerve palsy. His EMG at this point is negative.

Case 3. — The 51-year-old white female sustained bilateral femoral fractures requiring open reduction several months previously. She healed satisfactorily and had reasonably good ambulation but noted periodic instability of the right knee. This led to arthroscopic examinations and knee manipulations with attention concentrated on the joint until the thermogram noted in Figure 3 showed decreased heat in the distribution of the right femoral nerve. This anterior view of the thighs indicates that finding of asymmetry by virtue of the decreased yellow and red on the side of pathology. Later corroborated by EMG, this was the first indication of right femoral nerve injury at groin level contributing to the patient's prolonged recuperation.

Case 4. — The 37-year-old white male sustained fracture of the right humerus as well as cervical injury in two separate accidents several months prior to this examination. He has continued pain and weakness in the right arm not documented by EMG or myelogram. Figure 4 shows marked asymmetry with the patient's right hand four to five degrees colder than the left in certain areas as demonstrated by the darker blue and green. Though obviously asymmetrical, this is a much greater difference than is expected from nerve root irritation alone and could reflect

sympathetic dystrophy. The patient, however, had sprained his left wrist in a fall some ten days prior to this thermographic examination accounting for the increased heat on that side. While this makes an interesting comment on the sensitivity of the thermogram in detecting recent soft tissue injuries, it effectively negates this reading for nerve root irritation and would have to be repeated in three to four months when the soft tissue injury had subsided and the skin temperature returned to normal.

Case 5. — The 36-year-old male truck driver was tossed about severely in a truck accident, required several days hospitalization but did not sustain any known fracture. Several months after the accident, the clinical picture suggests major psychosocial factors at play. CT scan and EMG have been within normal limits. The patient, however, continues to complain of severely disabling pain radiating into his right arm and right leg. He has given up his driver's license and walks with two canes. He professes maximal disability and weakness in the affected extremities. Figures 5A and 5B are representative of this patient's thermogram in that it was completely benign and symmetrical. These posterior views of his upper torso and neck, as well as buttocks, show no evidence of unilateral nerve fiber irritation. This finding reinforced the position that no exclusionary myelogram was necessary, probably avoiding an extended hospital stay with protracted postmyelogram morbidity. In many such difficult medicolegal situations a strong clinical opinion based on noninvasive testing can be most helpful.

Case 6. — This patient is a 46-year-old female who had undergone right radical mastectomy for carcinoma as well as reconstructive mammoplasty on that side and reduction mammoplasty on the left. Hers is a complicated clinical situation made more worrisome by a suspicious lesion on mammography in the left breast. Useful as an adjunct in multimodality breast screening situations, the thermogram is thought to add considerably greater accuracy in cancer predictability than was previously considered (Fig. 6).

Case 7. — This 42-year-old male patient weighed more than 350 pounds, much too large for CT scan of the lumbosacral spine. Electronic thermography was eventually quite helpful in determining the level of nerve fiber involvement. This preliminary study, however, showed marked asymmetry with his left foot being some six or seven degrees centigrade warmer than the right, as noted by the yellow and white colors (Fig.7). The asymmetry is much too great for nerve root or peripheral nerve injury and is a result of spraining the left foot and ankle several days prior to this examination. Again, while negating this particular session for nerve root information, it provides a graphic example of the thermographic changes seen in other soft tissue local injuries.

Case 8. — This 42-year-old male had convincing changes of decreased heat as can be seen in the darker blue and green in the posterior view of his buttock and thighs in Figure 8A. This is read as left L5 and S1 nerve fiber irritation. Later pantopaque myelogram in Figure 8B showed significant disc protrusion on the left at L4-5. While the thermogram is quite helpful in determining which nerve fiber is involved, it does not replace the myelogram as a diagnostic tool since it cannot tell exactly where the nerve fiber is being irritated nor what is causing that irritation. Incidentally, note the varicose vein pattern about the posteromedial right distal thigh and popliteral area shown in yellow in Figure 8A. These are frequently seen and can sometimes complicate the thermographic reading when widespread. More usually, they are isolated and can be readily differentiated from nerve fiber involvement. This patient's thermographic asymmetry was persistent from the buttock through the thigh, the posterior leg below the knee, and appropriate areas in his left foot.

Case 9. — Figure 9A shows the pain diagram presented by the patient himself in his preliminary information sheet. Notice how closely the thermogram corresponds to his complaint (Fig. 9B). Here L4 nerve fiber involvement is shown by the pinker aspect of the anterior right thigh and the darker green over the right patellar region. This kind of close correlation to clinical complaint helps to convince most people as to thermography's usefulness in assisting diagnosis.

Results • In an effort to achieve some clinical relevancy with these thermographic findings, results were compared with other testing methods as best possible for nerve root irritation. It was not believed that EMG was the model for comparison since disc protrusion may well be subtle and not evoke motor changes. In addition, physicians have seen large disc herniations on myelogram with negative EMG. Similarly, CT scan would be a useful criterion when strongly negative or strongly positive, however, the reading of gentle bulges or even moderate herniation often does not correlate well with myelogram in my experience. Furthermore, the complete range of normal may not yet be well established for the adult CT scan in the lumbosacral area.

Arbitrarily, thermographic findings were compared with myelogram. There can be equivocal or minimal findings even on this study, but it remains generally the most reliable method on which to base surgical decision. It is also the test for which thermography strives to have predictive value.

Preliminary evaluation of the first 243 patients in my thermographic practice resulted in a total of 314 area studies (cervical, thoracic or lumbosacral). There were nine repeat studies, 32 patients with two areas of study and 15 patients with three areas of study. Of these 314 areas examined, 101 were read as basically abnormal, 198 were read as basically normal and 15 were read as equivocal. (Table 1.)

Of these patients, 63 eventually underwent myelogram. Thirty-seven were read as positive, 26 were read as negative. There were 32 patients with

Table 1

Total Patients		243
Repeat		9
Two Areas		32
Three Areas		15
TOTAL STUDIES		314
Total Positive	101 or 32%	
Total Negative	198 or 63%	
Total Equivocal	15 or 5%	

Table 2	
Total Myelogram	63
Positive	37
Negative	26
Positive Myelogram and Positive Thermogram	32
Negative Myelogram and Negative Thermogram	24
DIRECT CORRELATION - 56/63 or 89%	

both positive myelogram and positive thermogram, 24 patients with negative myelogram and negative thermogram. In other words, 56 of the 63 studies agreed for a direct predictive correlation of 89%. (Table 2.)

There were two patients with positive thermogram and negative myelogram, perhaps indicating some facet pressure or other factor not picked up on myelogram. Five patients with negative thermogram and positive myelogram could represent false negatives or might indicate incidental myelographic defects not associated with clinical findings. Details of these five cases are seen in Table 3; the first four patients did not come to surgery.

Table 3. — Cases with negative thermogram and positive myelogram.

#1 — CT scan also negative, EMG not done
#2 — EMG also negative
#3 — EMG also negative
#4 — CT scan and EMG also negative
#5 — No clinical improvement after laminectomy

These are preliminary figures based on final reported diagnoses of each examination without regard to equivocal or subtle nuances of interpretation. This is not a double blind study. Earlier definition of the thermogram in this experience was probably not as exact as those done later. However, disclaimers aside, these figures are easily comparable to those in several previous studies published by other authors. Done with appropriate attention to details of method and interpretation, the thermogram gives well above 80% direct predictive correlation with myelographic findings. A strongly negative thermogram will generally result in minimal change on myelogram. A strongly positive thermogram will indicate those patients who will probably show significant myelographic changes.

Discussion • The indications for obtaining a thermogram vary with the practitioner, his enthusiasm for the procedure and his type of practice. Clearly, it can be used to monitor the process of bony or soft tissue injuries such as fractures or joint sprains but will probably be little used since standard methods are so servicable for that purpose. However, in such cases with medicolegal overtones, the thermogram can help detect the presence or absence of soft tissue reaction in patients who are not able or not interested in returning to work. Thermography cannot be expected to pick up surface manifestations of pathologic processes or tumors deep within the body since there may not be any alteration in the surface temperature.

Since this test picks up or reflects the infrared heat emission from the patient's body, there is no intrusion by needles, radiation nor other noxious agent. It is totally harmless and, therefore, can be administered to pregnant females, children or other patients without fear of side effects. Skin color does not affect the reading. Thermography can be performed on extremely obese patients since the dermatome distribution is just as valid, even though some of these patients may be too large for CT scan capabilities and are usually not ideal myelogram candidates.

Where there is peripheral nerve insult, the thermogram can be very subtle indicator of early damage. Documentation of persistence of injury or improvement in nerve status can be quite dramatic and straightforward. Similarly, conditions which involve reflex sympathetic dystrophy or causalgia can be easily detected and graphically followed. The effects of sympathetic blocks or sympathectomy can be measured with ease and percision. The heat pattern in extremities can also be used to monitor conditions and levels of peripheral ischemia.

The troublesome issue of soft tissue injury about the vertebral column is given a new dimension of diagnostic understanding by thermography. Clear cut indication of unilateral paravertebral muscle spasm can often be demonstrated and its course visualized through improvement and gradual disappearance. Thermographic evidence of nerve root fiber irritation has been documented within 16 hours after injury and may well be present sooner in contradistinction to EMG changes which may take three to four weeks to appear.

The presence or absence of nerve root irritation can rapidly be quantitated to corroborate or disprove a patient's complaints of radicular pain. Reports have shown that disc protrusion or tumor involvement reflecting itself in nerve root compromise can be detected by thermography with an extremely high accuracy relative to myelogram, EMG, and CT scan. Interestingly, changes can often be seen on the thermogram in the absence of EMG or myelographic findings and are thought to be due to delicate sensory involvement such as foraminal root pressure not detectable by any other means clinically available.

As with all other diagnostic tests, the thermogram is not always decisive. Some patterns are vague, some findings are not clinically important or

may well represent incidental and long standing conditions. We are still in the process of trying to understand much of the information obtained. However, a positive thermogram may be the first or only indication of subtle nerve fiber irritation and may rapidly help direct further treatment or diagnostic efforts.

For all intents and purposes there is no such thing as a false negative thermogram. This comment has to be couched within the usual medical disclaimers and with the understanding that some readings can be equivocal or with only slight changes which can be interpreted in either direction. However, the very definite negative examination on thermography has been shown to correlate with very meager findings on EMG or myelogram. If there is a truly negative thermographic response, therefore, the chances of finding positive changes on EMG or myelogram are minimal.

For this reason, many exclusionary myelograms can be avoided as well as the associated morbidity and hospital expense. While a negative thermogram can be the basis for a strong statement in and of itself, the combination of a negative EMG and a negative thermogram can support the unqualified statement that there is no nerve root irritation detectable. In a number of patients, particularly those with compensation or liability overtones, such a position can be much more medically comfortable than it has been previously.

Before accepting thermographic results, one should know or investigate the thermographer. Only a very few centers train or certify thermographists at the present time and standardize their examinations. Later this year the American Academy of Thermology expects to produce qualifying programs and board certification tests, but they are not yet in effect throughout the country. The thermographic technician and the patient examination should be strictly supervised under carefully controlled conditions. The results should be capable of being recreated after an interval and of being interpreted by several thermographists with virtually the same findings noted.

The thermographic study can be quite helpful, but this test is not meant to take the place of a thorough neurologic or orthopedic examination. It is most useful but certainly does not revolutionize medical diagnosis nor patient care. It is the only test presently available to give objective determination of sensory nerve injury, but not every patient requires such testing. It is obviously not required for all patients involved in automobile accidents or injured on the job and should be utilized with appropriate thought and descretion by the treating physician.

Contrary to impressions suggested by the lay press or seen in legal journals, thermography does not show a picture of the patient's pain, that being a complex biochemical and psychosocial phenomenon not presently measurable. It is a demonstration of physiology, however, and can show sensory nerve changes which might reasonably or legitimately explain a patient's pain complaints. Conversely, absence of any such demonstrable involvement can also make a strong and helpful statement if there is continued pain behavior.

Since the test is innocuous and therefore not under strict FDA control and since extensive regulatory board guidelines have not yet been mandated, the potential for abuse is evident. The training credentials and professional background of anyone performing and interpreting thermography should be carefully considered. However, with professional medical control and appropriate regard to the basic physiologic mechanisms, a considerable amount of clinical information can be obtained. This test should be a part of every knowledgeable practitioner's armamentarium. In the present economic and medicolegal atmosphere, it is advantageous to obtain as much noninvasive and outpatient information as possible, particularly about compensation and liability cases. Thermography has an important place in that regard.

Summary • Thermography is emerging as a most useful adjunctive diagnostic test in the recognition and treatment of musculoskeletal injuries, peripheral nerve insult, reflex sympathetic dystrophy, and nerve root fiber irritation. It is a completely innocuous test and gives graphic indication of the presence or absence of such conditions. It presently provides the only objective documentation of sensory nerve fiber insult and may closely corroborate subjective radicular or peripheral pain complaints. As such, electronic thermography can be an important medical and medicolegal tool. It does not replace nor eliminate physical examination, CT scan, EMG or myelogram. However, it allows a new dimension of understanding for clinical pain complaints and can be applied with discretion to screen for more intelligent use of those invasive procedures. The mechanism of the test and indications for it should be within the awareness of all practitioners involved with such clinical situations.

References upon request.

Acknowledgement

I thank Debra Pacha, Thermographic Technician, for producing the photographs.

• Dr. Uricchio, 280 Canton Ave., Winter Park, 32789.

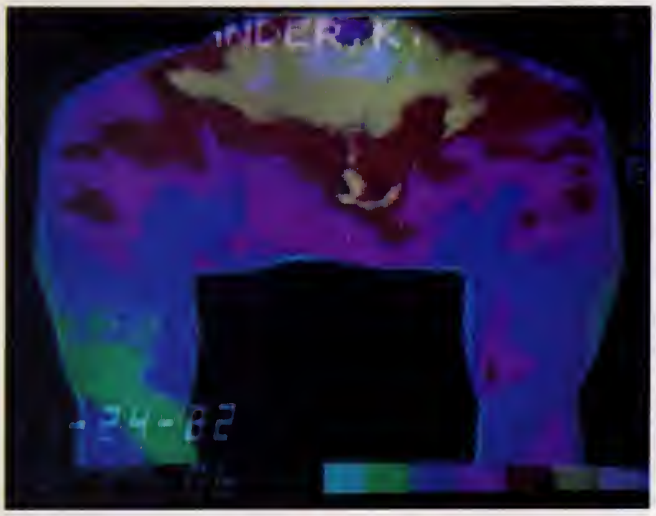


Fig. 1A — You are looking at the anterior aspect of the upper torso and arms. Note the temperature legend for this particular camera in lower right with each color 1°C colder progressing to the left.

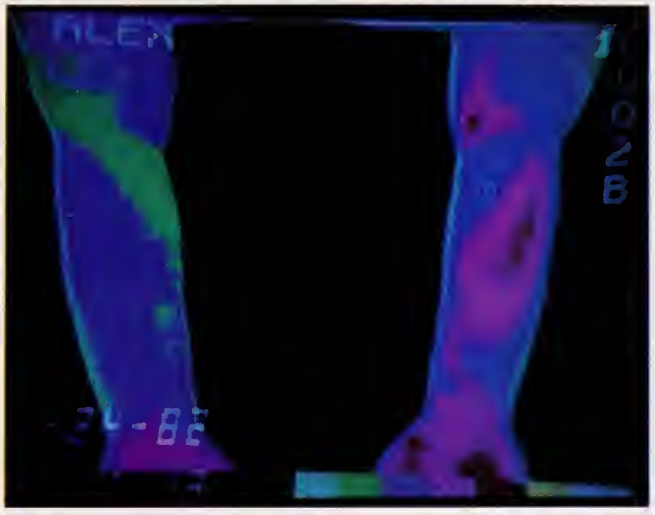


Fig. 1B — These two pictures show considerably colder right arm as can be seen by the darker blue and green colors. EM G also showed C7-C8-T, root neuropathy. Myelogram revealed small disc at C7-T, on the right.



Fig. 1C — Compare these thermograms of the same patient taken some ten weeks later. He has had spontaneous improvement and is now virtually asymptomatic. The thermogram has returned to symmetry.

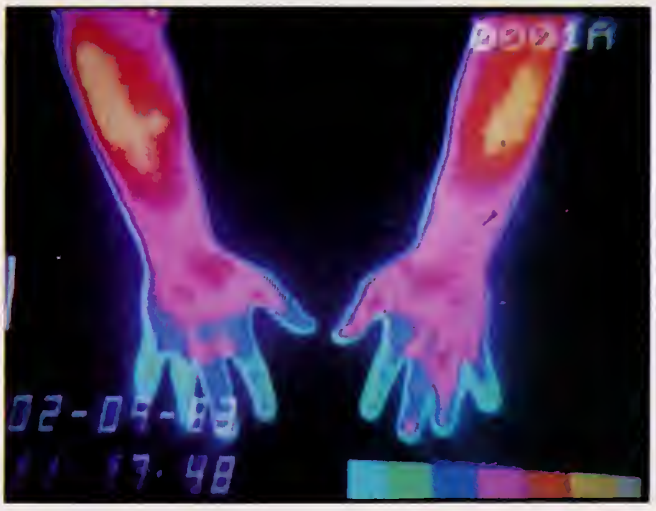


Fig. 1D — Note the corresponding areas of upper arms and forearms. Specific colors are not important as they can be set in the machine. But the course from asymmetry to symmetry closely followed the patient's clinical picture.

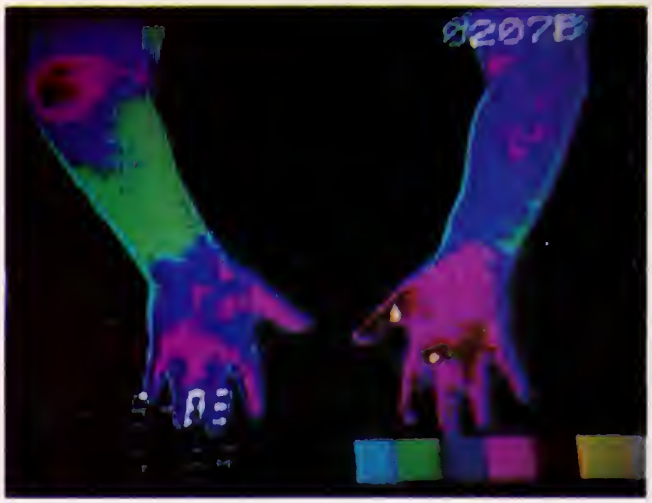


Fig. 2A — You are looking at this patient from the front. His right elbow shows pinker increased heat indicating the soft tissue changes about his healing fracture.



Fig. 2B — The darker green of his right forearm and hand reflects the decreased heat accompanying his peripheral nerve involvement. Ulvar nerve changes can be seen in his right ring and little fingers. His EMG is negative.

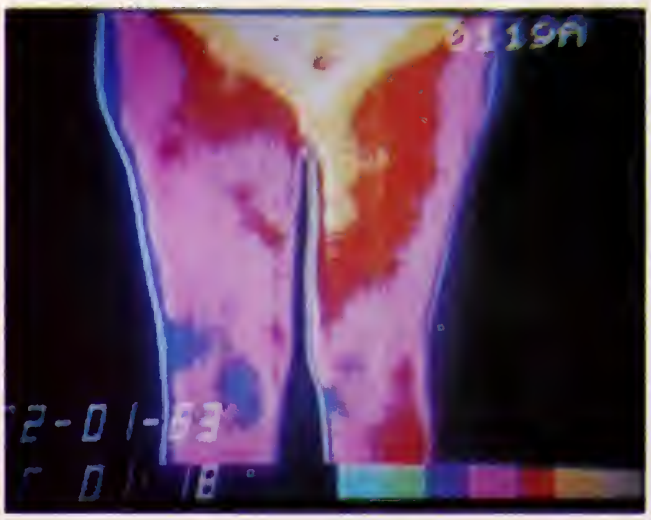


Fig. 3. — This is the anterior aspect of a patient's thighs. Her right side shows decreased heat demonstrated by the relative absence of red and yellow compared to her asymptomatic left side. EMG later showed right femoral nerve injury.



Fig. 4. — This patient's symptomatic right hand is several degrees colder than his left. However, he sprained his left wrist and hand in a fall a few days earlier. At present these changes can only be read for soft tissue injury and not for unilateral nerve fiber insult.

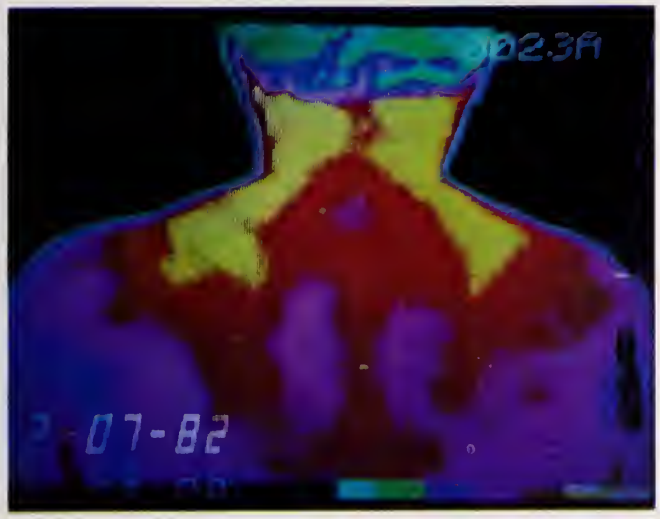


Fig. 5A — Posterior view of the upper trunk and neck is typical of this entire benign and symmetrical thermographic study. There are 54 different pictures in the usual cervical exam, and 63 pictures in the lumbosacral study.

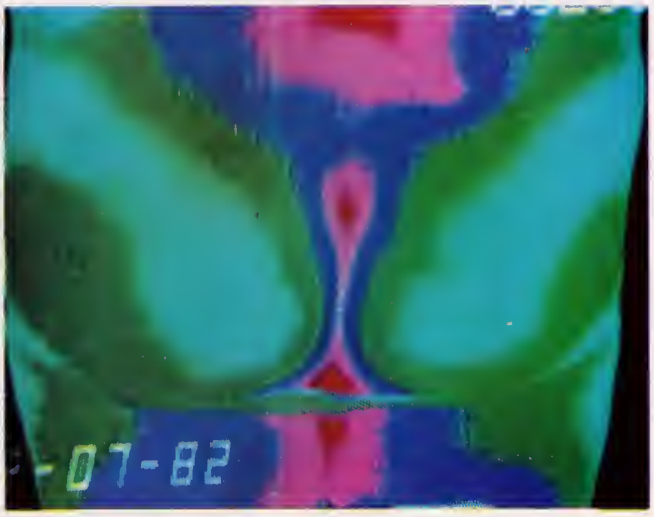


Fig. 5B — The buttocks also exemplify the completely normal examination on this patient. A strong medical statement can be made that there is no sign of unilateral nerve fiber involvement here, and no corroboration for continued pain complaints. Negative thermogram suggests minimal findings on EMG or myelogram.

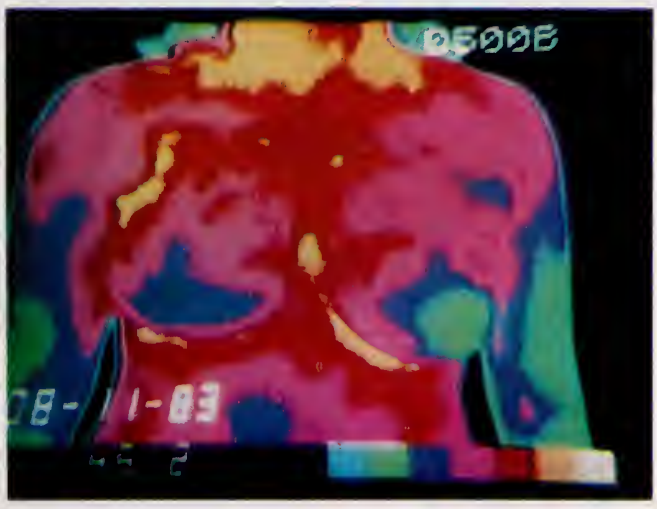


Fig. 6. — When used with other tests in a multimodality screening situation, breast thermography supplies an added degree of cancer predictability. It is usually well accepted by patients and is, of course, totally innocuous.

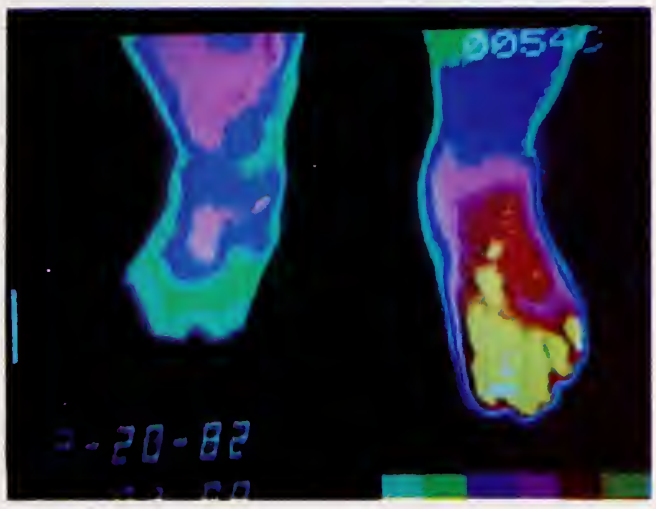


Fig. 7. — Surface temperature asymmetry of such major degree is usually on the basis of soft tissue injury as it was here. Eventually, however, thermography aided considerably in the diagnosis of this individual with low back pain who was much too large for CT scanning.



Fig. 8A — Posterior thigh view shows decreased heat on the patient's left by virtue of darker blue and green. This corresponds to left L5 and S nerve root fiber involvement. Note incidental varicose vein pattern in the right popliteal area.



Fig. 8B — Significant disc defect on left at L4-5 shows the site of nerve root pressure. The thermogram does not replace the myelogram, but does greatly assist the physician in determining which patient should or should not undergo that invasive procedure.

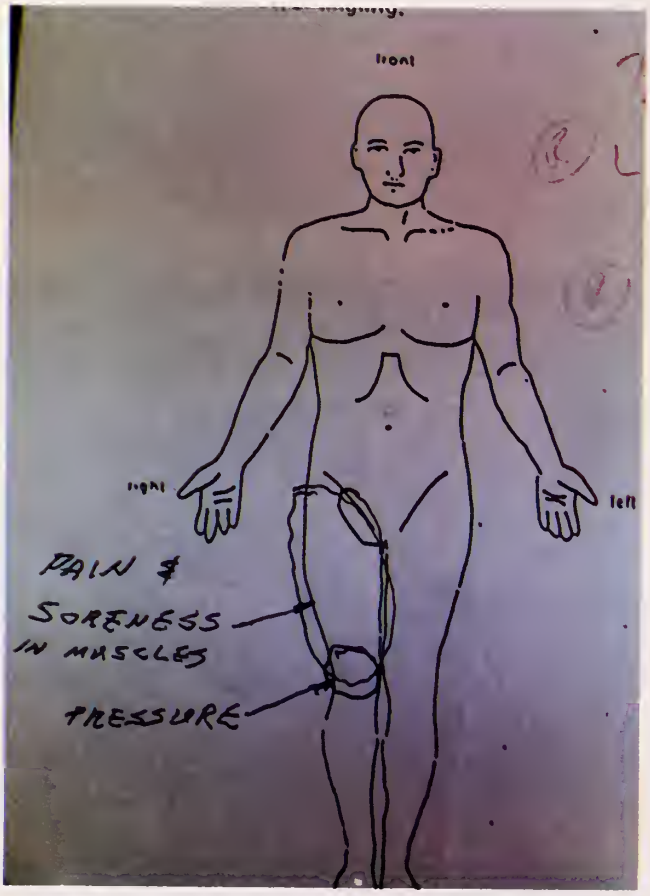


Fig. 9A — This pain diagram is filled out by the patient himself prior to thermogram. It is important to know the patient's present area of complaint. Thermographic findings can represent pre-existing or incidental conditions and may not relate to the situation of immediate clinical concern.

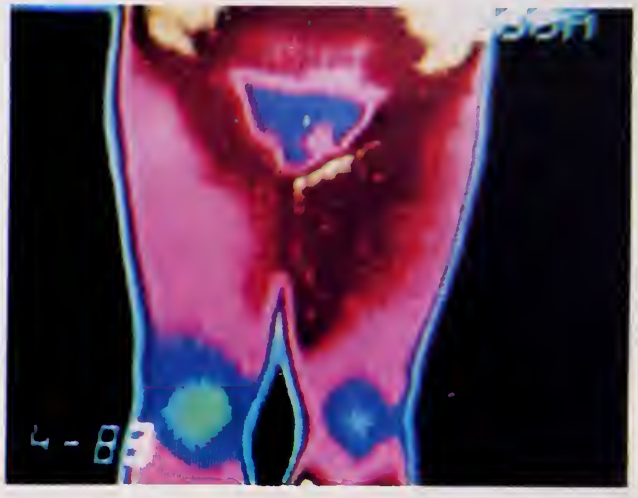


Fig. 9B — In this anterior view of the thighs note how closely the area of decreased heat over his right thigh and patella corresponds to his pain diagram. This was read as right L4 nerve fiber involvement, and is shown by the pinker area over the thigh and the greener area over the patella.

Suboccipital — retrolabyrinthine removal of acoustic neuromas

Albert L. Rhoton Jr., M.D.

ABSTRACT: Results are presented of 38 consecutive operations for removal of acoustic neuromas using the suboccipital-retrolabyrinthine approach. With this technique, the part of the tumor in the cerebellopontine angle is approached through a suboccipital crainectomy, and the portion of the tumor in the internal acoustic meatus is exposed in a retrolabyrinthine approach through the posterior meatal wall. There were no operative mortalities and some fascicles of the facial nerve were saved in 37 patients. At follow-up 27 had normal facial nerve function and nine partial retention. Only two patients required hypoglossal-facial nerve anastomosis because of a persistent facial nerve palsy.

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Acoustic neuromas are the most common tumors arising on the cranial nerves, frequently on the vestibular portion of the vestibulocochlear nerve. Enlarging, they expand the internal acoustic meatus and protrude into the cerebellopontine angle to compress the cerebellum, brain stem, and adjacent cranial nerves. The initial symptoms of hearing loss, tinnitus, and dizziness give way to facial numbness as the tumor grows upward against the trigeminal nerve; ataxia, weakness, and cerebellar dysfunction as the tumor expands medially to compress the cerebellum and motor pathways in the brain stem; difficulty of swallowing and loss of gag reflex as the tumor grows inferiorly against the glossopharyngeal and vagus nerves; and finally increased intracranial pressure with headache, nausea, vomiting, and papilledema due to mass effect and hydrocephalus.

Early attempts at surgical removal of acoustic neuromas were disheartening because of high morbidity and mortality. In 1917 Cushing[1] reported that he was unable to accomplish total removal in the majority of cases and that the operative mortality was 20% in 30 cases. In 1941 Dandy[2] reported total removal in the majority of cases and an operative mortality of 10.3%. In these early series a disfiguring facial palsy followed almost every complete removal of the tumor. Recent attention directed toward early diagnosis and use of surgical magnification has markedly reduced operative morbidity and produced more frequent postoperative preservation of the facial and acoustic nerves and, on rare occasions, retained vestibular function.[3-6]

This report reviews results in 38 consecutive tumor removals performed over the last four years using the suboccipital-retrolabyrinthine operative approach. The part of the tumor in the cerebellopontine angle is approached through a subocccipital

craniectomy and that portion in the internal acoustic meatus through the same craniectomy by removing the meatal wall posterior and medial to the labyrinth. There were no deaths and anatomic preservation of the facial nerve was achieved in 37 patients. At follow-up, 27 had normal facial nerve function and nine partial retention.

Patient population • This group of 38 patients ranged in age from 16 to 73 years and the diameter of the tumors from 0.6 to 6.0 cm. It was less than 1.0 cm in one patient, from 1.0 to 1.9 cm in six patients, from 2.0 to 2.9 cm in seven patients, from 3.0 to 3.9 cm in ten patients, and 4.0 cm or greater in 14 patients (Table 1).

Table 1. — Acoustic Neuroma, Diameter.

Diameters	Number
Less than 1.0 cm	1
1.0 — 1.9 cm	6
2.0 — 2.9 cm	7
3.0 — 3.9 cm	10
Greater than 4.0 cm	14
	38

Diagnosis • The impression that the patient had an acoustic neuroma was confirmed with CT scan in each case (Fig. 1). If a tumor was suspected but not demonstrated on routine contrast-enhanced scan, another scan was done following intrathecal administration of a few cubic centimeters of oxygen since the latter technique reveals even the smallest tumors. Angiography was done only if the scan suggested that the tumor was not an acoustic neuroma since vascular relations have been well documented in our previous studies.[7,8]

Operative technique • The operation is performed with the patient in the semisitting or three-quarter prone position through a vertical retromastoid scalp incision and a small suboccipital craniectomy just posterior to the mastoid and sigmoid sinus (Fig. 2A and B). Firm cranial fixation is achieved by a pinion head clamp which permits easy observation of facial movements when stimulating the facial nerve.

After opening the dura, the posterior wall of the internal acoustic meatus and the adjacent part of the tumor are exposed with gentle self-retaining retraction of the cerebellum. No attempt is made to see the whole tumor upon initially elevating the cerebellum. The posterior meatal lip is removed with

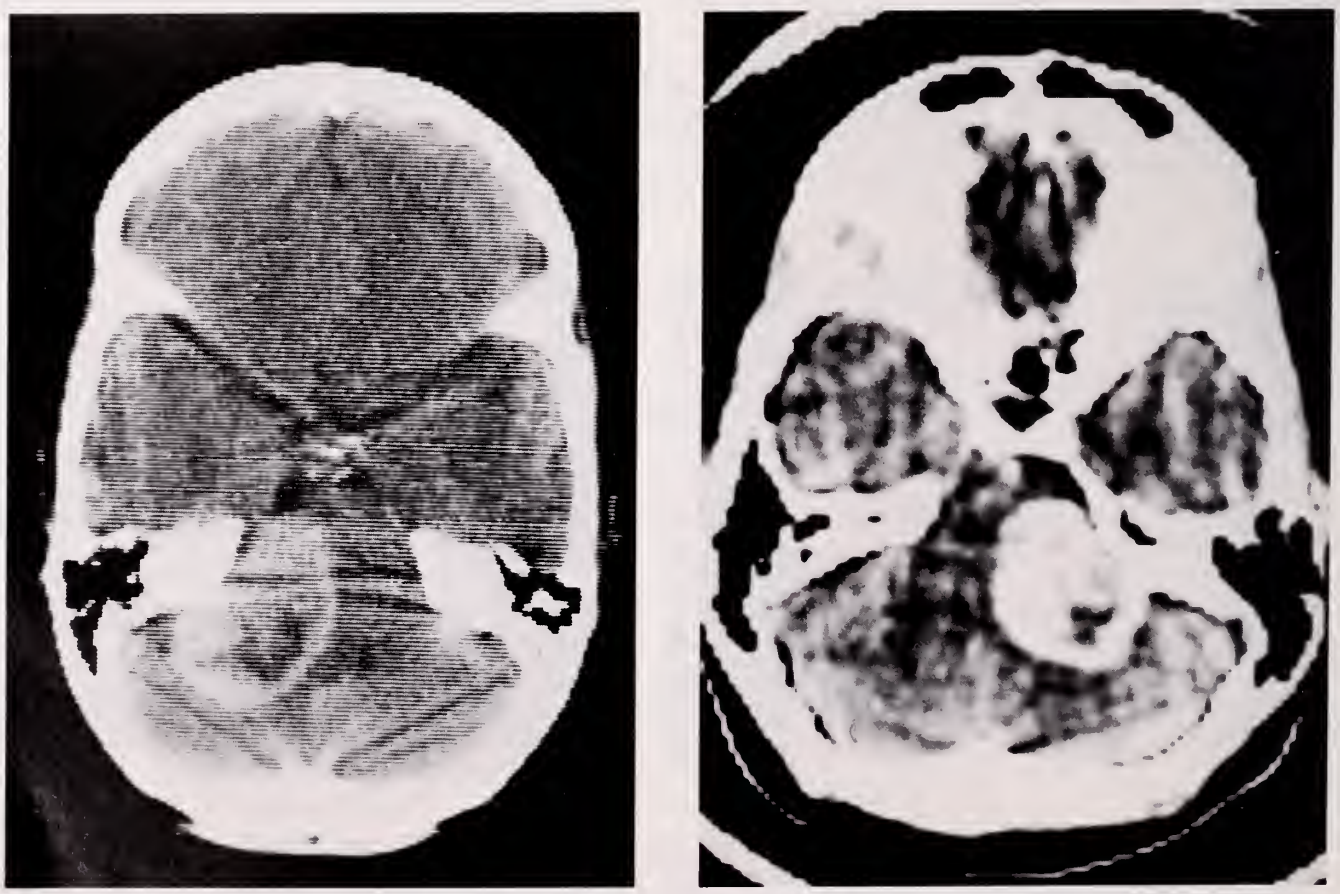


Fig. 1A and 1B — CT scans of two large acoustic neuromas which were removed while preserving the facial nerve. These tumors deeply indented the brain stem.



Fig. 1C — Small tumor (arrow) protruding in the right cerebellopontine angle demonstrated on CT scan following intrathecal administration of oxygen.



Fig. 1D — Small intracannicular tumor (arrow) confined to the right internal auditory canal demonstrated on CT scan following intrathecal administration of oxygen. This tumor was not removed because of its small size and the patient's advanced age.

irrigating drill and micro-Kerrison rongeur to complete the retrolabyrinthine exposure. Care is taken to avoid the posterior semicircular canal lateral to the wall of the internal acoustic meatus because opening this canal leads to loss of labyrinthine and cochlear function on that side. The facial nerve is identified lateral to the tumor near the origin of the facial canal at the anterior-superior quadrant of the meatus rather than in a medial location where the degree of displacement is more variable (Fig. 2C to E). The cochlear nerve normally lies anterior to the vestibular nerves and will be stretched around the anterior or anterior-inferior margin of the tumor. This nerve is much softer and more friable than the facial nerve and is more frequently destroyed by the tumor before the operation is performed; the tougher facial nerve more commonly functions well before operation.

After removing the part of the tumor within the meatus and identifying the facial and cochlear nerves, the intracapsular contents of the part of the tumor extending out of the meatus into the cerebellopontine angle and brain stem are removed (Fig. 2F). Working through a small opening in the lateral part of the tumor, initial removal allows the mass to shrink. Some have advocated cerebellar resection early in the procedure to expose the tumor,[1,2] however, it was not required in any patient in this series. As the intracapsular contents are removed, the tumor shifts laterally making it possible to remove more of it through the small exposure. In the final step, the capsule and the last thin shell of tumor are removed from the side of the brain stem, cranial nerves, and cerebellum (Fig. 2G and H). Vessels on the surface of the tumor are carefully preserved because they may supply the facial and vestibulocochlear nerves, the cochlear and semicircular canals and, on occasion, may loop medially to feed the brain stem.[7-9] Mastoid air cells that extend into the meatal lip and the craniectomy margin are closed carefully in order to prevent cerebrospinal fluid leakage or meningitis.

Results • There were no deaths. One patient suffered permanent neurological deficit, other than that related to the facial and vestibulocochlear nerves, involving the glossopharyngeal and vagus nerves. Prior to surgery, this patient had weakness of the gag reflex ipsilateral to the tumor, presumed to be caused by the acoustic neuroma but at operation, a meningioma was found arising at the jugular foramen near the glossopharyngeal and vagus nerves. Removal of this small meningioma appeared to aggravate the deficit. The patient did not complain but the deficit was easily demonstrated at follow-up examination. Numerous patients had trigeminal deficits with numbness of the face prior to surgery but these were not aggravated by surgery and most improved after removal of the tumor. A cerebrospinal fluid leak developed in one patient a week after surgery due to an opening into a mastoid air cell. It was closed at a second operation. Another patient who had hydrocephalus required ventriculoperitoneal shunt because of an increase in volume detected on follow-up CT scan.

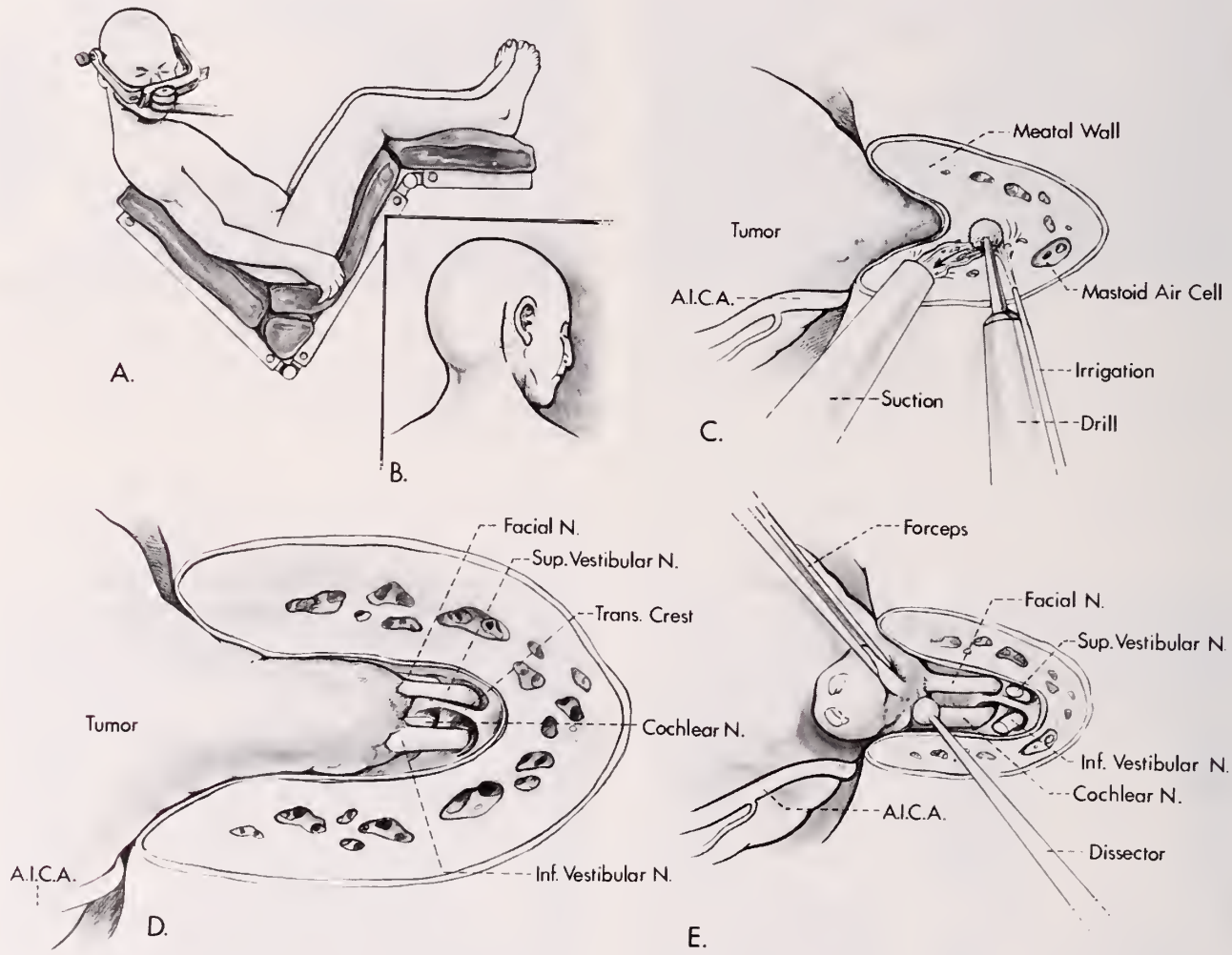


Fig. 2A-E. — Steps in removal of an acoustic neuroma. A. — The operation is done with the patient in the semi-sitting position with the head turned toward the side of the tumor. In Figure 3 the three-quarter prone position used for removal of some small tumors is shown. B. — The vertical scalp incision (solid line) and circular suboccipital craniectomy (dotted line) are located just posterior to the ear. C. — The orientation of the head is as shown in Figure 2B. The tumor is exposed in the right cerebellopontine angle where it protrudes medially from the right internal acoustic canal toward the cerebellum and brain stem. An irrigating drill is used to remove the posterior wall of the meatus to expose the intracannicular part of the tumor. The mastoid air cells, which are entered in the meatal lip, must be carefully closed in order to prevent a cerebrospinal fluid leak. The anterior inferior cerebellar artery (AICA) loops around the inferior margin of the tumor. D. — The transverse crest (Trans. Crest) divides the meatus into an upper and a lower compartment. The facial (Facial N.) and superior vestibular nerves (Sup. Vestibular N.) are above the crest, and the cochlear (Cochlear N.) and inferior vestibular nerves (Inf. Vestibular N.) are below the crest. E. — The tumor, which arises in the vestibular nerves, is being separated from the posterior aspect of the facial and cochlear nerves.

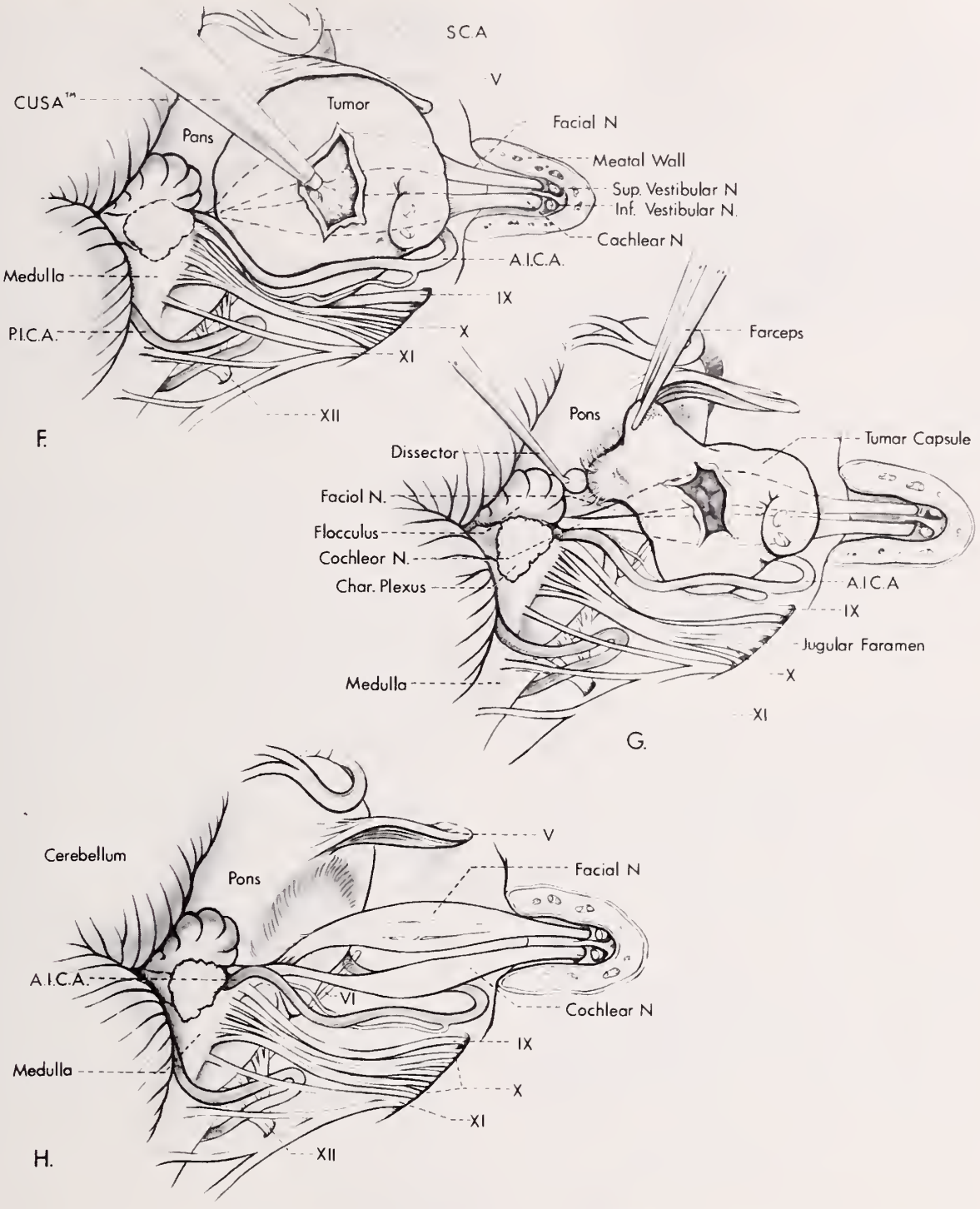


Fig. 2F-H. — The orientation is as shown in Figure 2B. The tumor within the meatus has been removed and evacuation of the contents of the tumor is being completed, using the ultrasonic aspirator (CUSA). An alternative method is to use a suction and cup forceps, or a laser. The tumor grows medially and deeply indents the side of the pons and medulla. The trigeminal nerve (V) and the superior cerebellar artery (S.C.A.) are above the tumor; the facial and cochlear nerves are anterior to the tumor, and the glossopharyngeal (IX), vagus (X), and accessory nerves (XI) are below the tumor. The anterior inferior cerebellar artery passes below the tumor and the posterior inferior cerebellar artery (P.I.C.A.) passes around the medulla between the rootlets of the accessory nerve. G. — The intracapsular removal of the tumor has been completed, and the tumor capsule is being separated from the side of the pons and medulla. The capsule has already been separated from the inferior margin of the trigeminal nerve, the upper margin of the glossopharyngeal nerve, and from the posterior margin of the facial and cochlear nerves. Choroid plexus (Chor. Plex.) protrudes from the foramen of Luschka just posterior to where the facial and vestibulocochlear nerves enter the brain stem. H. — The removal of the tumor has been completed. The tumor indented the side of the brain stem and flattened the facial and cochlear nerves as they pass around the anterior margin of the tumor.

Of the seven patients having tumors less than 2.0 cm in size, the facial nerve was preserved in every case and at follow-up, functioned normally (Table 2). Many of the 17 patients with tumors 2.0 to 3.9 cm in diameter had transient postoperative facial weakness but since surgery 13 of them have recovered normally. Three patients have partial recovery which has plateaued with good eye closure and enough movement that they cannot be improved by nerve anastomosis. One patient had beginning recovery at her most recent follow-up, three months after surgery. In the 14 patients with tumors greater than 4.0 cm in diameter, fascicles of the facial nerve were preserved at operation in 13. At the most recent follow-up seven patients had normal facial nerve function, three stable partial function with satisfactory eye closure which cannot be improved by nerve anastomosis, and two had improving function which has not plateaued. Two patients had postoperative facial nerve palsy which required treatment with hypoglossal-facial nerve anastomosis. In one of them this procedure was performed one week after tumor removal because the nerve could not be preserved at operation and in the other one year later because the nerve, preserved at operation, did not recover.

Discussion • Other operative approaches to acoustic neuroma in addition to the suboccipital-retrolabyrinthine approach include the middle fossa and translabyrinthine approaches performed by otologic surgeons.[10-13] In the former, the bony roof of the internal auditory canal is removed through a craniectomy above the ear. This is suitable for the infrequent, very small tumor confined to or protruding slightly from the internal auditory canal. In this series there were no tumors suitable for the middle fossa approach. In the translabyrinthine approach, the cerebellopontine angle is approached through a mastoidectomy and several semicircular canals are removed, thus disrupting the labyrinth and providing no opportunity for preservation of hearing. When the tumor is so large it cannot be removed through the translabyrinthine approach, the exposure may be enlarged by extending it backward through the sigmoid sinus into the suboccipital area. This combination is referred to as the translabyrinthine-transsigmoid approach. Silverstein and Norrell,[14] and Brackman[15] provide an excellent review of approaches performed by neurologic and otologic surgeons.

The suboccipital-retrolabyrinthine approach provides the only procedure wherein both large and small tumors can be removed with the possibility of preserving hearing. Small tumors are removed from within the internal auditory canal by resecting the posterior wall without disrupting the labyrinth. This also provides optimal exposure for dealing with larger tumors imbedded in the side of the brain stem.

In this series which includes many large tumors removed by the suboccipital-retrolabyrinthine approach, it was possible to save the facial nerve in the majority of cases. The results with tumors less than 2 cm in diameter compare favorably with results reported elsewhere in that it was possible to preserve the facial nerve and to have normal function retained in every case.[10,11,16,17] It was also possible to preserve function in the majority of patients with large tumors. Our system for grading postoperative retention and recovery of function is relatively simple. Patients are divided into those having normal, partial, or absent function. The nerve of those with partial recovery functions better than could have been achieved with anastomosis or a cosmetic reconstructive procedure. Only two patients in this series required a hypoglossal-facial nerve anastomosis; one because function was not recovered during the 12 months following surgery and the other because the nerve had to be sacrificed at its entry into the brain stem in order to achieve total tumor removal. The one postoperative deficit not related to the facial and acoustic nerve resulted from removal of a jugular foramen meningioma found at surgery.

Table 2. — Acoustic Neuromas.

Diameter of Tumor	No.	Results Facial Nerve (CN VII) CN VII Preserved at Operation	CN VII Normal Function	CN VII Partial Recovery	CN VII Recovering	CN XII-VII Anastomosis No Recovery
Less than 2.0 cm	7	7	7	0	0	0
2.0 — 3.9 cm	17	17	13	3	1*	0
4.0 cm or greater	14	13	7	3	2*	2

*Operation performed in last 12 months and facial nerve function still improving.

These tumors usually arise on the vestibular nerve and may displace but not destroy the cochlear portion, thus offering the potential for saving hearing in some patients who have not lost it prior to operation. Although the vestibulocochlear nerve, or some bundles of it, were preserved in approximately half the patients in this series, only four had useful hearing on the side of the tumor after operation. We attempt to preserve all fascicles of the vestibulocochlear nerve in all patients; however, surgery to remove an acoustic neuroma only infrequently results in preserved or improved hearing even when hearing has been retained prior to operation. The most favorable group for postoperative preservation of hearing are patients having tumors less than 1.5 cm in size, who have less than a 50 decibel hearing loss, and at least 50% speech discrimination. We previously reported a small series in which four of 18 patients had retained hearing after operation. One of these patients had both normal hearing and vestibular function after total removal of an acoustic neuroma.[4,5]

In the present series, at the time of operation it was thought that total removal of the tumor was achieved in every case; however, postoperative CT scan suggested possible recurrence in one patient. The small density at the operative site has not changed on serial scans done over a two-year period. Utilizing the combination of middle fossa, translabyrinthine, or translabyrinthine-transsigmoid approaches, House reported removal of the tumor in 75% of all patients in an earlier series[11] and 93.4% in a later series.[18,19] In the later series, total removal was possible in only 75% of patients with tumors larger than 4 cm. DiTullio and Rand[16,17] and House and Hitselberger[19] report a 6-7% mortality in removing tumors of a large size. Most deaths have been attributed to infarction of the lateral brain stem as reported by Atkinson.[8]

The sitting position used for many neurosurgical operations exposes the patient to the risk of air embolism and for that reason we modify it by raising the feet as high as the upper chest. All patients are monitored for air embolism with a Doppler placed over the heart and a central venous catheter. No mortalities or permanent morbidity have occurred at our hospital related to this position in over 600 operations during the last five years. The three-quarter prone position is used for removing some smaller tumors (Fig. 3).

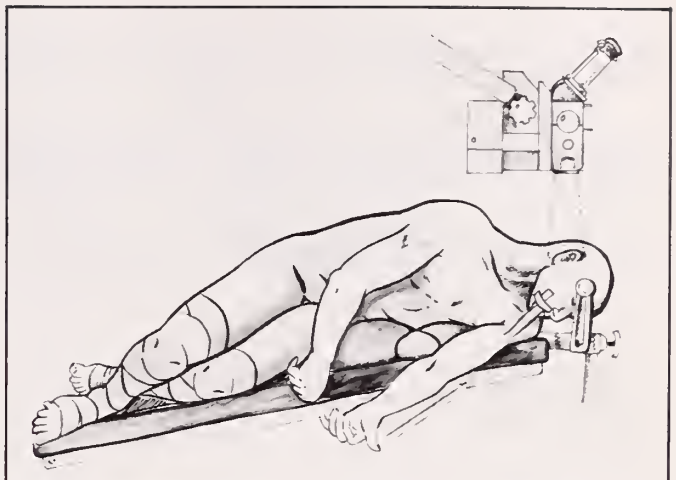


Fig. 3. — Alternative position for removal of the tumor, with the patient in the three-quarter prone position.

References

1. Cushing, H.: Tumors of Nervus Acusticus and Syndrome of Cerebellopontine Angle, Philadelphia/London, W.B. Saunders, 1917.
2. Dandy, W.E.: Results of Removal of Acoustic Tumors by Unilateral Approach, Arch. Surg. 42:1026-1033, 1941.
3. Pait, T.G.; Zeal, A.; Harris, F.S.; Paullus, W.S., and Rhoton, A.L. Jr.: Microsurgical Anatomy and Dissection of Temporal Bone, Surg. Neurol. 8:363-391, 1977.
4. Rhoton, A.L. Jr.: Microsurgery of Internal Acoustic Meatus, Surg. Neurol. 2:311-318, 1974.
5. Rhoton, A.L. Jr.: Microsurgical Removal of Acoustic Neuromas, Surg. Neurol. 6:211-219, 1976.
6. Rhoton, A.L. Jr.: Instrumentation for Acoustic Neuroma Removal, Silverstein and Norrell (eds.) Neurological Surgery of the Ear, Aesculapius, Birmingham, pp. 291-302, 1978.
7. Rhoton, A.L. Jr.; Martin, R.G.; Grant, J.L., and Peace, D.A.: Microsurgical Relationships of Anterior Inferior Cerebellar Artery and Facial-Vestibulocochlear Nerve Complex, Brackman (ed.) Neurological Surgery of the Ear and Skull Base, Raven Press, New York, pp. 23-27, 1982.
8. Atkinson, W.J., Jr.: Anterior Inferior Cerebellar Artery. Its Variation, Pontine Distribution, and Significance in Surgery of Cerebello-pontine Angle Tumors, J. Neurol. Neurosurg. Psychiatry 12:137-151, 1949.
9. Matsushima, T.; Rhoton, A.L. Jr., and Lenkey, C.: Microsurgery of Fourth Ventricle, Part I: Microsurgical Anatomy, Neurosurgery 11:631-667, 1982.
10. House, W.F. (ed.): Monograph I. Transtemporal Bone, Microsurgical Removal of Acoustic Neuromas, Arch. Otolaryngol. 80:597-756, 1964.
11. House, W.F. (ed.): Monograph II. Acoustic Neuroma, Arch. Otolaryngol. 88:S76-715, 1968.
12. House, W.F.: Surgical Exposure of Internal Auditory Canal and Its Contents Through the Middle, Cranial Fossa, Laryngoscope 71:1363-1388, 1961.
13. House, W.F., and Hitselberger, W.E.: Middle Fossa Approach for Removal of Small Acoustic Tumors, Acta Otolaryngol. 67:413-427, 1969.
14. Silverstein, H., and Norrell, H.: Neurological Surgery of the Ear, Aesculapius, Birmingham, 1978.
15. Brackman, D.E.: Neurological Surgery of Ear and Skull Base, Raven Press, New York, 1982.
16. DiTullio, M.V., and Rand, R.W.: Application of Microscopic Technique in Neurosurgical Removal of Acoustic Neuromas, in Rand, R.W. (ed.): Microneurosurgery, St. Louis, C.V. Mosby, 1976 (In press).
17. DiTullio, M.V. Jr.; Malkasian, D., and Rand, R.W.: Critical Comparison of Neurosurgical and Otolaryngological Approaches to Acoustic Neuromas, J. Neurosurg. 48:1- , 1978.
18. Hitselberger, W.E., and House, W.F.: Partial Versus Total Removal of Acoustic Tumors, Acoustic Tumors II, House, W.F., and Luetje, C.M. (eds.) Baltimore, University Park Press, 1979.
19. House, W.F., and Hitselberger, W.E.: Fatalities in Acoustic Tumor Surgery, Acoustic Tumors II, House, W.F., and Luetje, C.M. (eds.) Baltimore, University Park Press, 1979.

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A prototype community-wide screening program for colorectal cancer

Harvey E. Bernhardt, M.D.

ABSTRACT: A community-wide screening program for colorectal cancer was conducted in Jacksonville, Florida. Twelve thousand Hemoccult slides were given to unselected patients, 4,299 were returned (35.8%), and 323 were positive (7.5%). Of positive tests seven patients had cancers, 13 polyps, and 106 benign GI tract disease. Of the seven cancers, six were treated surgically, and all had stage A or B disease by the Duke classification. The seventh patient died without therapy and was never staged. Total follow-up was 41%. Large scale mass screening for colorectal cancer appears to be feasible.

Carcinoma of the colon remains one of the most significant malignant diseases of our time. An estimated 120,000 cases per year occur in the United States. It ranks second in mortality from cancer in both men and women.[1] Survival rates have varied little since the 1950s with overall five year survival at around 45%.[1]

In an attempt to assess the feasibility for large scale mass screening for this disease and also to determine the results of proposed screening efforts, a community-wide program was conducted in Jacksonville, Florida. October 1981-December 1981. It has served as a prototype for subsequent screenings in several cities nationwide. Key elements were participation of the medical community, electronic media, and a large pharmaceutical chain.

Program structure • Twelve thousand Hemoccult slides (SmithKline Diagnostics) were provided to individuals by Eckerd Drugs which maintains 13 pharmacies in virtually all sections of the city. The pharmacists were instructed on the method of specimen collection and the value of high bulk, meat-free diet. The slides were provided to the patients without charge. The following information was requested: Name, Age, Address, Telephone Number, and Name of Physician.

After obtaining three stool samples, the completed card was mailed in a preaddressed envelope to the laboratory in Jacksonville General Hospital. Specimens were brought to the laboratory daily and evaluated the same day. A central log book was kept.

If the patient had a negative result, a letter was sent informing him of it and possible implications. The letter stressed that although there was no evidence of colorectal cancer, only the patient's doctor could give him a "clean bill of health."

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If a positive result was obtained, a similar letter informed the patient and instructed him to see his physician who signed a slip and returned it to me. There was also a request for follow-up information. If no follow-up was received in four weeks a second letter was sent to the patient, again stressing the need for him to see a physician. A telephone call was made three to four weeks later if possible. A separate log was maintained on all positive patients indicating the level of follow-up obtained.

For persons not having a physician, a list of those accepting new patients was obtained from the local medical society and several names were provided on a rotating basis. For persons who could not afford medical care, referral was arranged with the local county hospital.

Media coverage • A week before the tests were distributed WTLV, Channel 12, presented a half-hour background program on colon cancer stressing the nature of the disease, its prevalence, and the importance of early diagnosis and therapy. On the weekend preceding the start of screening, the station sponsored a talk and call-in show using a local physician to discuss the disease. During the first week of screening the station carried features as a part of the local news broadcast at 6:00 pm. Thereafter occasional features were presented, one included an interview with a patient who had a positive test result resulting in the resection of an early stage cancer.

Results • All 12,000 test cards were given out within five days. Of those 4,299 or 35.8% were returned.

Three hundred twenty-three patients had positive test results (7.5%). Of these follow-up was obtained in 134 or 41%. Seven patients had carcinomas (5.2%), 13 polyps (9.7%), and 106 benign disease (79%). Eight patients (6%) had follow-up visits to physicians but no further work-up (Table 1).

Of the seven patients with malignant disease, one died prior to treatment and was not staged. An autopsy was not obtained. The others were either Dukes A or B-I. All had resections and are now alive with no evidence of disease.

All patients with benign polyps had those lesions resected and there are no known recurrences.

Table 1. — Results of Follow-up in Hemoccult Positive Patients.

	Number Patients	Percent
1. Carcinoma	7	5.2
2. Benign Polyps	13	9.7
3. Other Benign GI Tract Disease	106	79.0
4. Follow-up but no Further Work-up	8	6.0

Discussion • This program was designed as a prototype for future large scale mass screenings. Several aspects deserve special mention. The initial response was outstanding. Several times the original number of test cards could have been distributed. Instructions given by the pharmacists must have been excellent because all cards were submitted properly. Those submitted were tested.

The response rate of 35.8% was believed to be excellent and the subsequent rate of positive specimens and neoplasms fell within expected ranges. The follow-up rate of 41% was disappointing. The attitude of physicians varied from enthusiastically supportive to overtly hostile. Several refused to provide follow-up data while others provided no follow-up studies to their patients and instructed them to ignore the positive results. Follow-up was lost in many patients due to inability to communicate with them. We presume that many either did not adequately understand our desire to learn of their subsequent care or were prevented from communicating by age or debility. Many did not have telephones. We are hopeful that, although their follow-up remains unknown, they did receive adequate care. It would undoubtedly have improved our overall follow-up had we been more explicit in the request to the physician.

The role of the electronic media was extremely helpful. Compliance in returning the tests and in performing them properly may have been favorably affected by television coverage.

Mass screening for colon cancer, using slide tests for occult blood, is a controversial subject. Several groups including the American Cancer Society, International Workgroup, and National Cancer Institute have refused to recommend it.[2] Nevertheless our study has shown that even in a large and geographically heterogenous community mass screening is feasible. The response rate of 35.8% was particularly gratifying and, we believe, proves that patients can be motivated to comply with a protocol that requires them to handle stool, a less than enjoyable task. We were also highly pleased with the findings of early stage lesions in all the respected carcinomas — once again bearing out the assumption that if a patient is an asymptomatic positive, the lesion is likely to be in an early stage.

As previously mentioned, this protocol was designed as a prototype for other screenings. We will await these studies to see if they have similar results in compliance rates and tumor stages and, we hope, better results in total follow-up.

References

1 Silverberg, E.: Cancer Statistics, Ca 31:13, 1981.
2 Winawer, S.J. et al: Current Status of Fecal Occult Blood Testing in Screening for Colorectal Cancer, Ca 32:100-111, 1982.

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The FMA-FMF Impaired Physicians Program: The first 25 months

Guy T. Selander, M.D. and Mrs. B. David Epstein

Early in 1981, following many months of careful study and evaluation of similar programs elsewhere, the first patients were admitted to the Florida Medical Association and Florida Medical Foundation's Impaired Physicians Program (IPP). By February 1, 1983, 107 medical doctors and other health care professionals had been evaluated and channeled into treatment programs as appropriate and indicated.

The purpose of this paper is to summarize events leading to the establishment of this very important and much needed program; to report on the first 107 cases seen during the first 25 months of operation; and to report on the activities and concerns of the Florida Medical Foundation Committee on Impaired Physicians.

The first 107 cases included 93 medical doctors (86.9%), six dentists (5.6%), five pharmacists (4.7%), two osteopaths (1.9%), and one veterinarian (0.9%). The medical doctors were referred from various sources including anxious spouses, county medical societies, hospital medical staffs and the Department of Professional Regulation (DPR), which oversees the Florida Board of Medical Examiners and other professional licensing boards. It was this agency that referred the dentists, pharmacists, osteopaths and veterinarian.

Of the 93 medical doctors, 68 (73.2%) accepted hospital treatment; 15 (16.1%) were referred for outpatient service; seven (7.5%) refused treatment and were reported to DPR; and three (3.2%) were determined not to be chemically addicted.

Thirty-seven (54%) of the 68 hospital cases were treated for four months or more, and in this group treatment was not successful in five cases. There were four relapses, three of which received additional treatment.

Thirty-one medical doctors (46%) were treated for less than two months. Two walked out before completing the treatment program, and four relapsed.

Three physicians deceased • Unfortunately, three of the original 93 physician cases are now deceased. A psychiatrist in long-term treatment died by his own hand. A severely-impaired internist who refused treatment and was reported to DPR died as a result of a cocaine overdose. The third physician, an alcoholic, died of a heart attack shortly after treatment.

Twenty physicians have been free of chemicals for one year or more (Table 1).

Table 1

Free of Chemicals for:	Alcohol Dependence	Other Drugs	Dual Dependence	Total
More than 2 years	3	2	1	6
18 mos. to 2 years	2	2	3	7
1 year to 18 mos.	1	4	2	7
Totals	6	8	6	20

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It is indeed sad to note that the treatment regimen has not been successful with all who have submitted to it. Nevertheless, we view the initial results as impressive and certainly sufficient justification for the generous funding by the Florida Medical Association and the Florida Medical Association Auxiliary; and for the donation of valuable time and effort by many physicians and spouses, who have been willing to extend helping hands to those colleagues afflicted by the disease of chemical addiction.

On the bright side, there is in Florida today an unknown but fair number of physicians who have through successful treatment and personal determination survived the scourge of addiction and the degradation and despondency that accompany it to become once again happy and healthy individuals dispensing quality medical care to their patients. Out of gratitude for their personal rehabilitation, many of these recovering physicians have chosen to devote a significant part of their lives to assist those of their colleagues who are now suffering as they once did. Indeed, an effective IPP would not be possible without their involvement.

Out of gratitude for their personal rehabilitation, many of these recovering physicians have chosen to devote a significant part of their lives to assist those of their colleagues who are now suffering as they once did.

Early planning • Informal discussions and proposals that ultimately resulted in the creation of the Florida IPP began in the mid-1970s, with much of the impetus coming from the FMA Auxiliary, which has made important contributions from the very beginning. However, it was not until 1978-79 that the first significant steps were taken. During that period, Ray E. Murphy, M.D., of Pompano Beach, then Chairman of the FMA Committee on Membership and Discipline, researched the problem of the impaired physician and the programs then existing to deal with it.

In 1979, the FMA House of Delegates directed the Board of Governors to establish a statewide IPP. An ad hoc committee chaired by Joseph G. Matthews, M.D., of Orlando, was appointed, and this committee got down to work quickly and enthusiastically. During 1979-80, the Matthews Committee conducted investigations that included site visits to Georgia's highly successful Disabled Doctors Program and other established programs.

As a result of the work and recommendations of the Matthews Committee, the House of Delegates, in 1980, ordered the FMA to "establish, finance and undertake to implement a state-wide impaired physicians program for physicians whose use of alcohol or other chemical substances may interfere with their ability to practice medicine." The program was to be "supportive, rehabilitative, non-punitive."

Further, the House ordered the appointment of a permanent standing committee with FMA Auxiliary representation; employment of a medical director with experience in alcoholism or addictionology; installation of a telephone "hot line" for case reporting; establishment and training of intervention teams; and adequate funding for the program.

The program was to be "supportative, rehabilitative, nonpunitive."

Permanent committee • The then President of FMA, T. Byron Thames, M.D., of Orlando, selected Guy T. Selander, M.D., of Jacksonville, to chair the first permanent statewide Committee on Impaired Physicians. He selected Mrs. Frederick J. (Marybeth) Weigand of Deltona to be the Auxiliary representative. Rounding out the Committee were Dr. Matthews, who had chaired the previous ad hoc committee; Theodore J. Marshall, M.D., a Pensacola psychiatrist; and Dolores A. Morgan, M.D., an addictionologist in Miami who now serves as the IPP's parttime Medical Director

On September 13, 1980, the Committee met for the first time in Jacksonville. Among the more significant events of that meeting was Dr. Morgan's agreement to serve as Medical Director on a parttime and temporary basis so that planning could get underway immediately. This commitment and expression of faith by this remarkable woman, who turned to medicine after a distinquished career in nursing, has provided the program with the credibility and soundness necessary for its survival. She has often expressed her desire to withdraw from the post because of the many other demands upon her time, but out of loyalty and devotion to the cause of the impaired physician, she has remained on the job as the Committee on Impaired Physicians continues to search for ways and means of hiring a worthy fulltime successor.

Late in 1980 the FMA Auxiliary contributed a significant sum of money to the program, and in October, the Board of Governors provided a budget of $25,000 for the remainder of the year. The Committee has operated on a budget of $50,000 for each calendar year since.

The Committee recognized early on that it faced an uphill struggle to get the problem of the impaired physician out in the open; to remove the reluctance

of the profession to acknowledge that it even exists; and to gain acceptance of the fact that chemical addiction [alcoholism and drug addiction] is a disease similar in many respects to diabetes mellitus and not a manifestation of poor will power, a weak spirit, or moral decay. The fact that help and hope were now available and that the problem need no longer be ignored or concealed needed to be impressed upon physicians and spouses alike. The need for the continued support and involvement of the Auxiliary was absolutely necessary for in the case of chemical addiction, the problem becomes painfully obvious in the household of the afflicted long before it surfaces in the community, the medical office environment and the hospital.

The fact that help and hope were now available and that the problem need no longer be ignored or concealed needed to be impressed upon physicians and spouses alike.

Educational campaign • For these reasons the Committee embarked upon an intensive educational campaign calculated to create an atmosphere of awareness and hope. More than 100 physicians and spouses attended the Committee's first statewide conference, an educational half-day arranged in conjunction with the FMA Leadership Conference at Lake Buena Vista in January of 1981. This was followed by Committee-sponsored Sections on Chemical Dependency, scientific programs featuring nationally-known authorities on addiction, at the FMA Annual Meeting of 1981, 1982 and 1983.

Committee members, particularly the Chairman and Medical Director, have travelled thousands of miles within Florida to address the Florida Hospital Association, numerous county medical societies, hospital medical staffs, county Auxiliary units and other groups on the problem of chemical dependency and what can be done about it.

To date, four two-day Workshops on Intervention with Impaired Physicians have been conducted under Committee auspices in Miami, Tampa, Tallahassee and Orlando. Scores of physicians have attended these in 1983. Scores of physicians have attended these workshops, which aim to educate participants in the various aspects of chemical addiction, including symptomatology, the commonly abused substances, and the techniques of identifying the afflicted individual and guiding him or her into treatment.

County medical societies have been encouraged to establish Impaired Physician Committees, and many have responded affirmatively. Such committees serve important functions in the area of case-finding and referral, intervention, and after-care monitoring.

Caduceus Clubs have been founded in several Florida cities. These are groups of recovering physicians who meet often in a format somewhat similar to Alcoholics Anonymous, an important aspect of the rehabilitative phase.

Telephone "hot line" • What happens when an impaired physician is identified?

First, the report is made to the Medical Director via the "hot line," or to the county medical society Impaired Physician Committee, by a partner, some other colleague, the spouse, or perhaps a hospital administrator. In order to ferret out false reports, efforts are made to obtain corroborating information from other sources.

Assuming the report is vaild, the physician is asked to submit to evaluation by the Medical Director, a procedure that generally requires three days of physical examinations and observation.

The physician may report to the Medical Director voluntarily, or the services of an intervention team may be required. In the typical intervention, the physician is visited by two or more intervenors, at least one of whom generally is a recovering impaired physician. The evidence of addiction is laid out before the physician, and he is asked to submit to an evaluation voluntarily. If the physician balks or refuses for an intolerable length of time, the intervenors remind him of their responsibility under the Medical Practice Act to report him to DPR if he does not agree to evaluation and treatment if appropriate.

Sometimes county medical society Impaired Physician Committees will gather and confirm their own information and approach the suspected impaired physician without first making the report to the Medical Director. This is an acceptable approach, provided care is taken in gathering and confirming evidence of impairment in a confidential manner.

The evaluation may determine that organic brain syndrome or some psychiatric illness — not addiction — is at the root of the impairment, in which case the physician is referred for treatment outside the IPP, since under the existing program only alcoholism or drug addiction can be addressed. The Florida Psychiatric Society has compiled a list of psychiatrists willing to accept referrals of physician patients.

Assuming the evaluation points to chemcial addiction, an appropriate treatment program is suggested. Here again, if the physician refuses, he is reminded of the requirement that he be reported to DPR.

28-Day treatment program • The basic 28-day in-hospital treatment program is prescribed for most of the less-than-severe cases. Most of these patients are treated at South Miami Hospital or at another facility in Florida, but some are referred outside the State. The more complicated and severe cases require

an extended program lasting generally four months and utilizing the "half-way house" concept. This extended treatment program is not available in Florida at present, and the patients requiring it are referred outside the State, particularly to medical society sponsored programs in Georgia and Mississippi.

Once he or she has completed treatment and is returned to the community in either the former practice setting or in a modified and restricted one, the recovering physician is monitored from time to time by at least one designated physician and is expected to attend meetings of Alcoholics Anonymous, Narcotics Anonymous and/or Caduceus Clubs regularly.

It is important to stress that once treatment is completed, the case is not closed. To the contrary, the physician is monitored for at least two years afterwards to assure that normal recovery is progressing.

The aim of the IPP is to get the patient drug free, excepting of course antihypertensives and other drugs prescribed for other diseases. Methadone clinics and similar regimens are not used in our program. The Committee does not approve any treatment plan that essentially substitutes one drug for another. In the case of alcoholism, the patient can never "drink" again, even socially, for this pattern eventually and inevitably leads to relapse.

It is important to stress that once treatment is completed, the case is not closed.

Approved treatment facilities • What are the essential characteristics of an approved treatment facility? Basically the Committee has determined there are six: (1) accreditation by the Joint Commission on Accreditation of Hospitals (JCAH); (2) active involvement of physicians in the treatment program; (3) affiliation with Alcoholics Anonymous and Narcotics Anonymous; (4) a family-centered care program; (5) an after-care program; and (6) the program must have been in existence for at least four years.

Utilization of physicians trained and experienced in addiction and its treatment cannot be overemphasized. All too often sick physicians and laymen alike have been warehoused in institutions, frittering away hundreds and even thousands of dollars on a "treatment program" that consists mainly of custodial care and occasional encounters with a physician.

The phenomenon we call "spouseaholics," wherein members of the sick physician's household often exhibit many similar symptoms, points up the need for programs involving the entire family.

The Committee has approved four treatment facilities in Florida based on its criteria.

Confidentiality • Confidentiality has been a matter of justifiable concern to impaired physicians and to those who would undertake their treatment. Existing Florida law (Medical Practice Act) requires Florida-licensed physicians to report to DPR and the Board of Medical Examiners those of their colleagues believed to be in violation of the Medical Practice Act. As part of a "gentlemen's agreement" a former Secretary of the Department of Professional Regulation exempted the reporting of impaired physicians so long as they are enrolled in an approved treatment program, are progressing well, represent no danger to their patients, and are not otherwise in violation of the Medical Practice Act.

Subsequent Secretaries of DPR have abided by this agreement. However, the position is somewhat tenuous, and the FMA and the Florida Psychiatric Society have been working with representatives of DPR and the Board of Medical Examiners in developing confidentiality legislation for consideration by the 1983 Legislature.*

Work remaining • Although much has been accomplished with this important program, much also remains to be done. Our 107 cases represent apparently only the tip of the iceberg. Various authorities quote different statistics on the incidence of impairment among physicians. Regardless of whose estimates one is inclined to believe, it is clear that the stresses of modern medical practice put physicians at risk more than most other population groups.

There are untold numbers of physicians out there today who are in the early and later stages of addiction who could be helped but are going untreated because of denial, lack of knowledge about our program, reluctance of colleagues to get involved or some other equally poor excuse.

We believe the potential caseload demands the employment of a fulltime medical director who could devote more time to refining casefinding techniques, developing local Impaired Physician Committees, and generally shoring up the mechanism now in place. The major obstacle, of course, is money, for to refine the program and enlarge its capacity would require a major commitment of funds.

Approaches to funding • There are several approaches to funding:

(1) Imposition of a $10 per dues-paying member assessment by FMA, or allocation of a portion of each member's dues each year.
(2) Combining with other state organizations in an inter-professional program funded by a pro-rata assessment against each group.
(3) Adopting the approach used by New Jersey, where the state medical association secured funding

from the state hospital association and the physician-owned malpractice insurance company to supplement its own funds.

(4) Providing services of the existing IPP under contract to DPR and the Florida Board of Medical Examiners using State funds.

Approach 1 may not be feasible at the present time, but Approach 2 might hold some promise. Over a period of several months, the Committee has been engaged in dialogue with representatives of the Florida Osteopathic Medical Association, the Florida Veterinary Medical Association and the Florida Dental Association. The osteopaths and veterinarians have been enthusiastic about a possible combined program, but the interest of the dentists has waxed and waned over the months.

By putting together funding as described in Approach 3, the Medical Society of New Jersey was able to employ a fulltime medical director in 1982 with a medical society contribution substantially less than the Florida IPP's annual budget. Up to this point, no serious consideration has been given to the New Jersey approach in Florida.

However, because of the state licensing authority's interest in the identification, treatment and rehabilitation of the impaired physician, Approach 4, or some variation, probably is most logical. Steps in this direction were taken in 1982, when the Florida Medical Association led successful efforts to persuade the Legislature to appropriate $150,000 to the Board of Medical Examiners for an impaired physicians program. FMA proposed that the BME contract with the Florida Medical Foundation to provide the services of the existing IPP.

Program Liaison Committee • By invitation, an FMA representative was appointed to a seat on the Impaired Physicians Program Liaison Committee of the Board of Medical Examiners. In mid-1982, the FMA representative was recalled by the Board of Governors when discussions about how best to spend the legislative appropriation reached a stalemate. However, early in 1983, FMA participation in the work of the Liaison Committee was resumed.

Economic consequences • This paper would not be complete without some discussion of the economic consequences and remedies for chemically dependent physicians who undergo treatment and rehabilitation. Chemical dependence is very costly in terms of time away from work (lost income) and hospitalization.

Assuming even that the impaired physician's practice has not deteriorated from neglect, he still faces total loss, or markedly reduced, income for the month or more that he is away for treatment. In more severe cases, the physician may not be able to practice and earn income for an extended period. All the while, the cost of maintaining the professional office (if it remains open) continues, as well as personal household expenses. The cost of treatment can run into many thousands of dollars. In many cases the economic impact of the illness is devastating.

The FMA-FMF Impaired Physicians Program does feature a loan fund from which loans of up to $2,500 can be made to FMA members to help meet the cost of treatment. These low-interest loans must be for treatment and cannot be used for living or other expenses. In fact, checks conveying the loans must be made payable to the facility treating the physician.

The FMA-FMF Impaired Physicians Program does feature a loan fund from which loans of up to $2,500 can be made to FMA members to help meet the cost of treatment.

Like the IPP itself, the loan fund is run through the Florida Medical Foundation, the non-profit scientific educational and charitable adjunct of FMA. Donations are tax-deductible. The bulk of the loan money has been accumulated through the sale of the reproductions of the painting "Caduceus," by the late Jacksonville artist Lee Adams.

Physicians wishing to apply for a treatment loan should apply in a letter to the Chairman of the Committee and enclose a county medical society endorsement of the request.

Health and disability insurance • Health and disability plans, even those sponsored by medical associations typically offer restricted benefits for treatment of addiction. It is high time that these insurance plans begin treating chemical addiction like other diseases and start paying on the same basis they pay for other illnesses and procedures. Treatment is not all that expensive when compared with other treatments and procedures being done today. For example, treatment of chemical dependency for four months in our program costs less than a coronary by-pass operation.

Summary • One hundred seven health care professionals, including 93 medical doctors, have been evaluated during the first 25 months of the Florida Medical Association and Florida Medical Foundation's Impaired Physicians Program. Results generally have been very good. The program has grown to the point where retention of a fulltime medical director is highly desirable. Ways to fund an expanded program should be explored.

* The 1983 Florida Legislature did pass a modified confidentiality law.

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NOTES & NEWS

Preventing alcohol-related birth defects is goal of new state-funded campaign

A new state grant of $95,000 will finance a large-scale public educational campaign by pediatric geneticists at the University of Florida's College of Medicine to increase awareness of alcohol-related birth defects.

Democratic State Representative Frederick Lippman, a pharmacist from Hollywood, successfully garnered legislative support for funding the program, aimed at reducing the incidence of physical and mental abnormalities that may result from alcohol intake during pregnancy. The funds are being directed to UF through the Children's Medical Services program of the state's Department of Health and Rehabilitative Services (HRS).

Dr. Jaime L. Frias, professor and chief of pediatric genetics in the College of Medicine's Department of Pediatrics, says various communications media will be used to provide both health care professionals and the public with updated information on how alcohol may affect the unborn child.

"Our Division of Pediatric Genetics will serve as a resource center from which school teachers, community health agencies, hospital personnel, staff members of HRS, church groups and others may obtain films, tapes and printed material regarding this problem," Frias said.

"In the past, we spent a lot of time warning people about the 'fetal alcohol syndrome,' a specific group of physical defects and impairments to the brain and other organs which fit a well-defined pattern," he added. "In this expanded effort, we hope to communicate the fact that a variety of problems, including miscarriages, premature births, and mild to severe physical and mental impairments may result from alcohol ingestion during pregnancy."

Frias notes that since it is not known whether or not there is a "safe limit" of alcohol intake during pregnancy that would spare the fetus from damage, "we will make a special effort to reach teen-agers and pregnant women with the message that alcoholic beverages should be eliminated from the diet throughout pregnancy in order to enhance the chances for having a healthy baby."

"Through this major project, we also hope to better identify the magnitude of alcohol-related birth defects," said Frias. "Although a few regional studies have indicated the incidence ranges from 1 in 750 to 1 in 500 of all live births, there has been no accurate documentation of cases."

Although alcohol-induced damage to the unborn child has been described in ancient literature as far back as 4000 years B.C., it has only recently been recognized as a common occurrence. "The key message of this new statewide campaign will be that all of these alcohol-related birth defects, including the most severe cases of the syndrome, may be prevented via abstinence from alcohol during pregnancy." says Frais.

Special certification offered in general vascular surgery

The American Board of Surgery, with the approval of the American Board of Medical Specialties, offers Certification of Special Qualifications in General Vascular Surgery. By definition, this Special Certification is offered to those whose training and activities encompass General and Thoracic Surgery. It is not the intent of the American Board of Surgery to consider granting the certificate to those surgeons whose training and practice encompass that vascular surgery expected of all Diplomates of the American Board of Surgery and/or Thoracic Surgery. Rather, it is intended to be limited to those surgeons who by virtue of additional approved training beyond that usually acquired in a residency in Surgery and/or Thoracic Surgery have demonstrated exceptional knowledge and skill. The first examination is scheduled for November 18, 1983.

JCAH publishes the 1983 Consolidated Standards Manual

The Joint Commission on Accreditation of Hospitals (JCAH) has announced publication of the 1983 edition of the *Consolidated Standards Manual for Child, Adolescent, and Adult Psychiatric, Alcoholism, and Drug Abuse Facilities.* The *Consolidated Standards Manual* contains state-of-art standards for psychiatric and substance abuse facilities. It is

designed to serve as an educational and self-assessment tool for staff in these facilities, as well as an accreditation survey instrument.

To order the *Consolidated Standards Manual*, send $30 per copy to: Cashier, JCAH, 875 N. Michigan Avenue, Chicago, IL 60611. For further information regarding any JCAH publication, telephone the Department of Publications at (312) 642-6061.

PLI UPDATE

Closing a medical practice

There are numerous steps which must be taken prior to a physician closing his practice. The general procedure to follow for some of the more important considerations will be addressed in this article. The four areas which will be discussed are: Notice to your patients; medical records; disposition of narcotics, and notice to your insurors.

Notice to your patients • A physician who closes his practice should notify all active patients. This is necessary in order to avoid any kind of abandonment allegation from patients who have been treated by the physician. The notice can be provided by a form type letter or a postcard.

The timing of the notice is also important. Patients should be notified sufficiently in advance of the closing of the practice so that a new physician can be found. In addition, any continuing treatment that needs to be provided should either be concluded or the patient should be assisted in finding a qualified doctor to conclude this treatment. Some physicians will need to give more advance notice than others (example: a surgeon may need to provide more advance notice than a physician who conducts purely an office practice).

The content of the notice should provide the patient with general information regarding the closing. The time that the physician expects to terminate his practice and arrangements regarding the availability of medical records should be included. The patient should be informed how they might be transferred to a subsequent treating physician. Any other information which could be relevant to a specific type of practice or individual patient should be added as necessary.

Medical records • When closing a practice the physician must make provisions for medical records. These records are the property of the physician, not the patient. However, the records are protected from disclosure by the physician as confidential information. If the patient so requests, in writing, the records may be transferred to another physician or to the patient.

Records should not be destroyed upon closing the practice. To destroy the records would be a great disservice to both the patient and the physician (or the physician's estate). The records may be important in defending a malpractice claim against the physician or against his estate. It may, in fact, be the only defense available. For the protection of the physician and his estate the records should be retained for at least a maximum period of the statute of limitation, which is presently seven years in Florida.

The records may contain information that is vital to the later treatment of the patient; or perhaps the information in the records would be helpful in assisting the patient to qualify for an insurance policy, or a new job, or in the patient's claim for injuries resulting from an accident.

Clearly, it would be wasteful and a disservice to both the patient and the physician to destroy such potentially valuable records.

Dispensing with narcotics • Narcotics and other dangerous drugs is another special area of concern for the physician closing his practice. The physician will be registered under the provisions of federal law and will have numerous official documents used for the odering and dispensing of narcotics.

It is very important that the federal government be notified of the closing of a physician's practice and that the official documents be disposed of in the proper manner. In addition, there are specific quidelines and criteria which the physician must follow in disposing of any narcotics or dangerous drugs which he has in his possession.

The specific guidelines and criteria which a physician should follow in disposing of dangerous drugs and narcotics, the official forms, and his license, as well as the documentation which is required for each of these procedures, can be acquired by writing to the Bureau of Narcotics and Dangerous Drugs, Department of Justice, Post Office Box 28083, Central Station, Washington, DC 20005.

Notification of the physicians insurers •The physician will have several types of insurance policies in connection with his practice. Upon the decision to close the practice a conference with the insurance agent is indicated at an early date.

Generally, the following points can be noted. Insurance to protect the physical assets against loss or accidental destruction can be cancelled once the ownership of the insured property is transferred. Similarly, any liability insurance policies on the physicians premises may be cancelled after the premises are vacated. In both cases there should be a refund for the unexpired term of the policy.

Professional liability insurance may be cancelled upon the physicians death, but the retiring physician should consider keeping his professional liability

insurance in force if he expects to treat an occasional patient or be at all available for consultation. It must be noted, that malpractice claims frequently do not arise for several years after the treatment is rendered and therefore arrangements should be made with the professional liability insurer for any claim which may arise in the future.

Finally, the physician probably also has some form of workers compensation insurance. This insurance should not be cancelled while the physician, or his estate, still have employees working.

The points discussed in this article are only a few of the steps which must be taken for a physician to close his practice. These four areas have been discussed because they are areas which virtually all physicians must address. Careful consideration must be given to many other areas of the practice including: disposition of the partnership or corporation; sale of physical assets; the office lease; good will, and office management. This article should be used only for general guidelines.

This article was prepared and submitted by John E. Thrasher, J.D., Vice President and Legal Counsel and Thomas S. Edwards Jr., Law Clerk.

DEAN'S MESSAGE

A house divided?

Today, the House of Medicine is undergoing extraordinary pressure for change, from both internal and external sources. The existence of our medical delivery system and the physician-patient relationship is seriously threatened, unparelleled in modern times. Some of these pressures are prospective payment reimbursement system, health maintenance organizations, preferred provider organizations, cost containment boards, public outcries of lack of compassion and too much technology, professional liability insurance crises in epidemic proportions, and finally, the physicians who choose not to be involved in organized medicine.

Through a variety of federal initiatives aimed at a reduced cash outlay for medical care in the nation, a prospective reimbursement system for hospitals will begin on October 1, 1983. As recorded earlier, this system will cause tension between physicians and hospital management. The unique synergistic partnership between these two groups will be threatened. In the future, it appears that a prospective reimbursement system will be imposed on physicians themselves, the third-party essentially mandating what a "reasonable" professional fee should be — irregardless of the level of quality care that is delivered.

Health maintenance organizations, at first a free-enterprise venture, have been subsidized by public monies in order to effect change in the medical care costs. This growing movement has fueled the divisiveness among physicians nationwide — and in Florida.

Discount medicine in the form of preferred provider organizations has caused our House to be further unglued and disassembled. What their future holds in these medically turbulent times is unknown.

Similar to Federal initiatives, state governments in an attempt to reduce expenditures for medical care formed Cost Containment Boards. Some have absolute authority, while others have only persuasive authority. The Boards tend to classify hospitals according to size and charges without regard to qualifications of the medical staff or costs (*versus* charges). Many physicians believe that Cost Containment Boards are problems for hospital management only. Few realize that Cost Containment Boards may obtain Legislative authority for physician reimbursement limits.

In the cry for public accountability, professional liability suits have escalated in the past decade, exacerbated by avaricious attorneys. Judicial awards in many cases transpose "reasonable" to "ridiculous." The awards necessarily have increased insurance premiums to an extent that some specialty physicians have curtailed the scope of their practices. Organized medicine has effected some change in the professional liability arena, but major revisions need to be made and can be made — if we are united. The Florida Medical Association's 1983 Legislative Program contains some examples.

Next, the public is complaining about physicians' "lack of compassion" and our obsession with high technology. Lack of compassion is a perception of the consumer, but if it is a perception, then we are not communicating with our public — patients and their families. High technology is not an obsession, it is real and it is here to stay. Our individual patients are demanding the best care available.

Finally, if a high quality of medical care in this nation is to survive, we as physicians must rally, unite, set priorities for the future course, and maintain the helm. Communicate the advances that medicine has made. Become not only responsible to our patients but responsive. Encourage our colleagues who are not members of the organized profession to join, become knowledgeable of the issues, and participate.

Remember the words of Abraham Lincoln, "A house divided against itself cannot stand."

William B. Deal, M.D.
Dean, College of Medicine
University of Florida

WORTH REPEATING

Stanching the welfare hemorrhage

An opponent of President Ronald Reagan's economic program decried that a continuation of such a program would destroy those institutions that had made this nation strong. The institutions he was referring to are the various entitlement programs for which appropriations were not increased this year.

Actually, during the first 156 years of this republic, the time during which we grew from a fledgling nation to the strongest of world powers, the federal government funded no welfare programs. The financial resources of this nation were employed solely to fulfill the dictates of the Constitution, namely to provide for a strong defense and carry on the basic functions of the government in regard to interstate commerce and the levying of taxes.

It was only in 1932 with then President Franklin D. Roosevelt's megalomaniacal dedication to the perpetuation of himself in office that the welfare was the business of the local community and the private sector. The federal government did not feel obligated to subsidize illegitimate children or compensate an individual with more payment for not working than he would receive gainfully employed at minimum wage. There was no Social Security taxation. Politicians repeating Roosevelt's formula for political success have vied with one another to continue the welfare state ever since.

Even the traditionally conservative Republican presidents did not have the temerity to reverse the course. At their best, they only slowed the process, sometimes due to Democratic control of Congress.

As a result, the base of productive workers, the contributors to the system with their tax dollars, has become proportionately smaller. The number of welfare consumers has increased. In addition, government workers resulting from the increase in the bureaucracy necessary to administer the variety of entitlement programs add to the burden on the taxpayer.

In the last 51 years we have reversed the first 156 years, resulting in the relative financial weakness that besets us today. Our military resources have been dangerously reduced by past administrations in the rush to increase entitlement programs.

One of the few shining hours this republic has known was when our resources were mobilized into the space program. We were the first nation to put a man on the moon and excel in outer space. These were moments when we returned to our former glory and strength. Yet, even then, there were those who complained that the funds which made these great accomplishments possible would have been better spent for welfare handouts.

To correct the disastrous trend of previous administrations that evolved slowly but surely over the past five decades may prove to be impossible. The present administration has endeavored to set in motion a corrective evolution back to the tested principles upon which we achieved our greatest strength. The adjustment must necessarily be harsh, especially when the majority of our citizens have known no other system. Unfortunately, one of the costs has been temporary recession and increased unemployment.

Unemployment caused many labor unions to oppose to present course. Paradoxically, it's these gainfully employed taxpayers who have the most to gain if their taxes are reduced along with the burden of nonproductive, entitled recipients. The issue is in doubt at this time. Already Congress is reducing military programs designed to close the lead the Soviets have enjoyed.

When the bleeding hearts cry out that we are destroying programs that made America strong, we must stanch the hemorrhage by applying the tourniquet of historical fact. We must educate them to the fact that the provision of welfare handouts was never a part of the federal government during the 156 years of its greatest growth.

John J. Fisher, M.D.
Jacksonville Beach

Reprinted with permission from *Private Practice*, August 1983.

CORRESPONDENCE

Routine laboratory monitoring with nonsteroidal anti-inflammatory drugs

To the Editor: There has been much publicity recently regarding adverse effects related to use of the nonsteroidal anti-inflammatory drugs in the treatment of rheumatic diseases. This has been particularly true in the case of Oraflex (Benoxaprofen, Lilly) and Zomax (Zomepiric sodium, McNeil) both of which have been taken off the market within the past several months. We rheumatologists probably

have the most experience utilizing these drugs, but there are very few guidelines pertaining to monitoring these medications. There are wide discrepancies regarding measures for monitoring potential toxicity in this group of anti-rheumatic agents.

In spite of extensive evaluation of Oraflex by both researchers and clinical investigators (including ourselves), the drug was hastily withdrawn from the market, partially due to pressure from consumer groups but also because the Eli Lilly Company wanted to further evaluate the problem in greater detail. Certainly the prospects for rerelease of this agent are very unlikely at this time, and a potentially beneficial addition to our armamentarium has probably been irretrievably lost. One must wonder why thousands of clinical trials in this country, country, extensive enough to satisfy the stringent requirements for release of a new drug by our FDA, failed to detect the problem of hepatic and renal toxicity that has been reported in Great Britain.

Perhaps there is a rather simple explanation. In a recent article by E.C. Huskisson, an internationally renowned and well respected British Rheumatologist, the statement is made that "apart from gastric intolerance, side effects are infrequent and no particular routine tests are required during treatment with these compounds".

There is no consensus of opinion among clinical rheumatologists in the United States regarding monitoring for adverse reactions. An informal poll taken by us in discussions with researchers, medical directors of drug companies, and clinical rheumatologists in private practice, revealed that frequency of laboratory monitoring ranges from none to every few weeks, although, prescribing information on these agents invariably stresses the fact that hepatic and renal complications are well known and appropriate studies need to be evaluated periodically.

It has been our practice over the past few years to perform a biochemical profile as baseline prior to a long term therapeutic course of any nonsteroidal anti-inflammatory drug. This is followed by serial studies at two months and then every four months until the drug is discontinued. A urinalysis is done at least yearly to detect interstitial nephritis or "analgesic nephropathy", renal disorders which are well documented with the use of these drugs. Complete blood counts are also performed intermittently.

It is true that our monitoring program was adopted arbitrarily, but, it seems that the cost of doing these studies is outweighted by the assurance to the physician and patient that the drug is causing no metabolic problems. An actual case history will serve to illustrate the need for such a program.

Mrs. J. K., a bank employee, was started on a course of Naproxen (Naprosyn, Syntex) for very symptomatic interphalangeal osteoarthritis on April 8, 1982. She returned to the office approximately two weeks later stating that she was much improved. At that time, an SMA-25 was performed and she was found to have an alkaline phosphatase elevation to 172 units (normal values 30-115 units). The other studies including bilirubin, LDH, SGOT, and SGPT were completely within normal limits. The patient was told to continue the medication and to avoid alcoholic beverages. She returned two weeks late and this time the alkaline phosphatase was found to be elevated to 909 u. There was also found to be a minimal increase in SGPT to 52 u (normal values 0-45 u). The patient was told to discontinue Naprosyn and two days later the alkaline phosphatase was found to be 824 units. Serial determinations after this, off medication, revealed the alkaline phosphatase to be 375 u one week later with gradual reduction to 201 u on June 2, 1982. At that time, the patient was complaining bitterly of her symptoms and subsequently was started on Oraflex which was on the market at that time. While taking Oraflex, a repeat SMA-25 on July 6, 1982 revealed no elevation of the alkaline phosphatase or any other liver enzyme. She stated that the Oraflex was effective but not quite as helpful as was the Naprosyn. When the Oraflex was taken off the market she was switched to Feldene, which she is currently taking. On last determination of May 12, 1983, her biochemical profile was completely within normal limits. It is planned to perform a monitor on this patient every four months.

This is an actual case history, and it is thought highly probable that if the hepatic enzyme abnormality had not been detected early, the patient may have developed serious irreversible liver disease and possibly even death, as with the case with the British patients on Oraflex. Certainly the cost and inconvenience of doing serial drug profiles is justified if only a very occasional situation such as the one above is detected early.

We have other cases as well which demonstrate the need for periodic monitoring. Although not as striking as the one presented here, they serve to reinforce the need for this type of procedure.

One may speculate whether the multiple deaths reported in England might have been avoided with a similar program of regular monitoring. At any rate, we believe that this problem should be brought to the attention of the thousands of physicians who prescribe nonsteroidal anti-inflammatory drugs, so they may consider adopting some type of monitoring procedure.

Charles B. Kahn, M.D.
Wayne A. Riskin, M.D.
Hollywood

Correction

Editor's Note: Due to an error in layout an incorrect abstract was printed for the article, "Florida Regional Perinatal Intensive Care Program developmental evaluation component — early developmental outcome" by Michael B. Resnick, Ed.D., et al, (page 833) in the September Special Issue of *The Journal of the Florida Medical Association* on Perinatology. The correct abstract is printed below:

ABSTRACT: Developmental Evaluation Follow-up was initiated in 1974 as an integral component of the Florida Regional Perinatal Intensive Care Centers Program in order to evaluate the long-term development of program participants. The program provides early identification of children with, or at risk for, developmental delay. Case management with appropriate referral, consultations, treatment, and intervention services are triaged with Children's Medical Services.

Preliminary statewide developmental follow-up data for 5239 infants treated within the Regional Perinatal Intensive Care Centers (1976-1982) revealed an 11% incidence of developmental delay. Children with lower birthweights had a significantly higher incidence of developmental delay (500-1000 gm, 21%; 1001-1500 gm, 14%) than children with higher birthweights (1501-2500 gm, 8%; 2501 gm, 9%). Comparison of these data with other reported studies suggests that the Florida Regional Perinatal Program has accomplished a reduction in the incidence of developmental delay among participating children.

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The effectiveness of diazepam in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindications: Tablets or capsules in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

> ***Usage in Pregnancy:*** **Use of minor tranquilizers during first trimester should almost always be avoided because their use is rarely a matter of urgency and because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

ORAL Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral forms adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

INJECTABLE *To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling and, rarely, vascular impairment when used I.V.: inject slowly, taking at least one minute for each 5 mg (1 ml) given; do not use small veins,* i.e., *dorsum of hand or wrist; use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Injectable Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.*

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest; concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea; have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence; can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of diazepam, *i.e.*, phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed and tolerated).

The clearance of diazepam and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

INJECTABLE Although promptly controlled, seizures may return; readminister if necessary; not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures; use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated

Adverse Reactions: Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, observed in patients during and after diazepam therapy are of no known significance.

INJECTABLE Venous thrombosis/phlebitis at injection site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia.

In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

Dosage: Individualize for maximum beneficial effect.

ORAL *Adults:* Anxiety disorders, relief of symptoms of anxiety—Valium (diazepam/Roche) tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 Valrelease capsules (15 to 30 mg) daily. Acute alcohol withdrawal—tablets, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; or 2 capsules (30 mg) the first 24 hours, then 1 capsule (15 mg) daily as needed. Adjunctively in skeletal muscle spasm—tablets, 2 to 10 mg t.i.d. or q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily. Adjunctively in convulsive disorders—tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily.

Geriatric or debilitated patients: Tablets—2 to 2½ mg 1 or 2 times daily initially, increasing as needed and tolerated (see Precautions). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose.

Children: Tablets—1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use in children under 6 months). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose (not for use in children under 6 months).

INJECTABLE. Usual initial dose in older children and adults is 2 to 20 mg I.M. or I.V., depending on indication and severity. Larger doses may be required in some conditions (tetanus). In acute conditions injection may be repeated within 1 hour, although interval of 3 to 4 hours is usually satisfactory. Lower doses (usually 2 to 5 mg) with slow dosage increase for elderly or debilitated patients and when sedative drugs are added. (See Warnings and Adverse Reactions.)

For dosages in infants and children see below; have resuscitative facilities available.

I.M. use: by deep injection into the muscle.

I.V. use: inject slowly, take at least one minute for each 5 mg (1 ml) given. Do not use small veins, i.e., *dorsum of hand or wrist. Use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.*

Moderate anxiety disorders and symptoms of anxiety, 2 to 5 mg I.M. or I.V., and severe anxiety disorders and symptoms of anxiety, 5 to 10 mg I.M. or I.V., repeat in 3 to 4 hours if necessary; acute alcohol withdrawal, 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary. Muscle spasm, in adults, 5 to 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary (tetanus may require larger doses); in children *administer I.V. slowly*; for tetanus in infants over 30 days of age, 1 to 2 mg I.M. or I.V., repeat every 3 to 4 hours if necessary; in children 5 years or older, 5 to 10 mg repeated every 3 to 4 hours as needed. Respiratory assistance should be available.

Status epilepticus, severe recurrent convulsive seizures (I.V. route preferred), 5 to 10 mg adult dose administered slowly; repeat at 10- to 15-minute intervals up to 30 mg maximum. Repeat in 2 to 4 hours if necessary, keeping in mind possibility of residual active metabolites. Use caution in presence of chronic lung disease or unstable cardiovascular status. Infants (over 30 days) and children (under 5 years), 0.2 to 0.5 mg slowly every 2 to 5 min., up to 5 mg (I.V. preferred). Children 5 years plus, 1 mg every 2 to 5 min., up to 10 mg (slow I.V. preferred); repeat in 2 to 4 hours if needed. EEG monitoring may be helpful.

In endoscopic procedures, titrate I.V. dosage to desired sedative response, generally 10 mg or less but up to 20 mg (if narcotics are omitted) immediately prior to procedure; if I.V. cannot be used, 5 to 10 mg I.M. approximately 30 minutes prior to procedure. As preoperative medication, 10 mg I.M.; in cardioversion, 5 to 15 mg I.V. within 5 to 10 minutes prior to procedure. Once acute symptomatology has been properly controlled with injectable form, patient may be placed on oral form if further treatment is required

Management of Overdosage: Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure; employ general supportive measures, I.V. fluids, adequate airway. Use levarterenol or metaraminol for hypotension. Dialysis is of limited value.

How Supplied:

ORAL Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100 and 500; Prescription Paks of 50, available in trays of 10; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25 and in boxes containing 10 strips of 10.

Valrelease (diazepam/Roche) slow-release capsules—15 mg (yellow and blue), bottles of 100; Prescription Paks of 30.

INJECTABLE: Ampuls, 2 ml, boxes of 10; Vials, 10 ml, boxes of 1; Tel-E-Ject® (disposable syringes), 2 ml, boxes of 10. Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buffers, and 1.5% benzyl alcohol as preservative.

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BOOK REVIEW

Book Review Editor — **F. Norman Vickers, M.D.**

The Youngest Science: Notes of a Medicine Watcher

By Lewis Thomas, M.D., 270 Pages. Price $14.75. Viking Press.

Lewis Thomas, renowned biologist, medical scientist and educator, is one of the most exciting physician writers to emerge on the scene in recent years. His simple, casual style sparkles with charm, wit and elegance. A leading spokesman for science and medicine, he has published two best-seller books and won a National Book Award in the past ten years.

In recognition of his talents as a medical scientist and as a writer, the Alfred P. Sloan Foundation, as part of its efforts to promote public understanding of science, asked Dr. Thomas to write a book focusing on medicine. The result is *The Youngest Science: Notes of a Medicine Watcher.*

Although *The Youngest Science* is intended mainly for the general public, it has equal appeal for physicians. Physicians of Dr. Thomas' generation (he is 70 years old) will savor a trip back to the struggling years of medicine. Younger physicians will welcome the opportunity to explore an era far removed from today's CAT scans and other modern heritage.

Dr. Thomas' autobiographical account begins with his boyhood on Long Island where his father was a busy general practitioner. The author describes the frustrations of practicing medicine in the era of house calls, home deliveries, long working hours with little financial recompense and few effective medicines.

Despite his early introduction to the limitations of medical science and his awareness of its small financial reward, Thomas enrolled at Harvard Medical School in 1933. Dr. Thomas admits that his undergraduate record at Princeton was less than impressive but that he was accepted at Harvard because of his father's friendship with Hans Zinsser and because there was little competition for medical school admission. Thomas had his early postgraduate training at Boston City Hospital where he encountered some of the same frustrations that his father had coped with. Although he trained under clinicians on the order of William Osler, he discovered there was little that could be done to stem the tides of pneumonia, tuberculosis, syphilis and rheumatic fever. However, he recognized flickers of hope for medical science in such developments as the creation of the Thorndike Memorial Laboratory, and the use of sulfa drugs.

During his years as a fellow in Neurology in New York and Boston, Lewis Thomas developed an interest in immunology and microbiology. This interest was fostered by his experiences in Guam and Okinawa as part of a Rockefeller naval research unit during World War II. This unit was charged with studying the various mysterious tropical diseases that could create havoc among the troops fighting in the Pacific.

When Lewis returned from the war, he began his trek up the academic ladder. His path took a circuitous course as he hopped from one prestigious institution to another. His academic career which began at Johns Hopkins, took him to Tulane, the University of Minnesota, New York University — Bellevue — and then to Yale to serve as dean of the medical school. Thomas' impressive career finally led to his appointment as president of Memorial Sloan-Kettering Cancer Center in New York City. During these years of academic appointments, he did basic research on endotoxin, rheumatic fever, the Schwartzman reaction, and chymopapain. He taught residents and fellows, some of whom have attained national recognition in Pathology; served as dean of two medical schools — New York University and Yale — and vigorously fought for public health reforms in New York City. Today Dr. Thomas continues to serve as chancellor at Sloan Kettering. The most memorable years of his aca-

demic experience were probably at NYU and Bellevue which he feels is "the most distinguished hospital in the country."

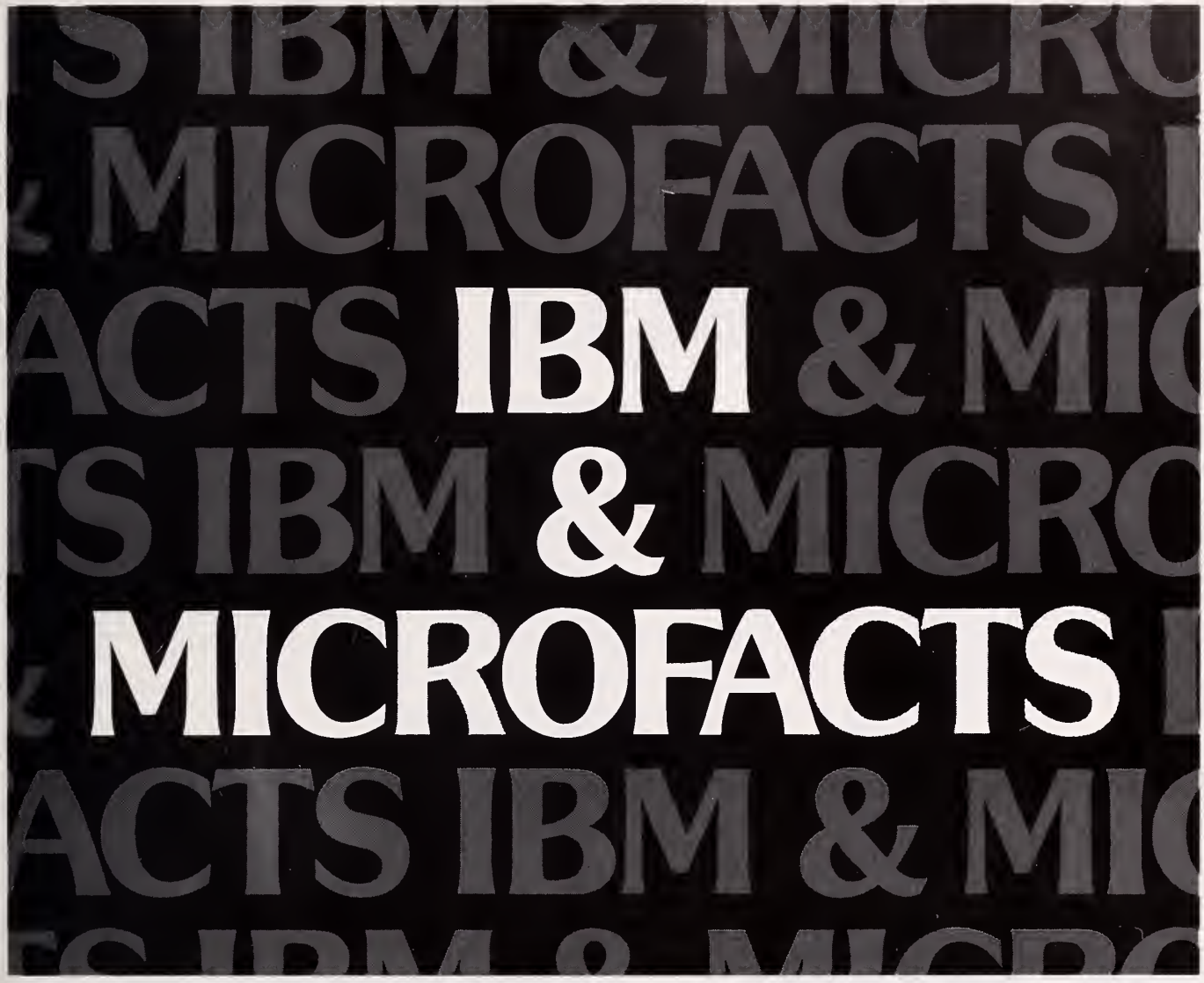
Dr. Thomas' reminiscences include some philosophical digressions on various subjects. He aceords a warm salute to nurses, predicts that cancer will be conquered in this century and shares his personal reflections on being a patient, first during his hospitalization for massive GI bleeding, and later for a broken leg. Each of these shared memories is a nugget of wisdom, wit, intelligence and humanity.

Dr. Thomas fittingly concludes his book with a chapter that describes his becoming a medical writer. The author's writing career was launched in 1970 when he gave a lecture on inflammation. The late Dr. Franz Inglefinger, then the editor of *The New England Journal of Medicine*, heard the taped lecture, liked his style, and invited Thomas to write a monthly essay for the prestigious publication. Dr. Thomas accepted the invitation and began his monthly column, "Notes of a Biology Watcher." In 1973, a collection of these essays was published as a book entitled *The Lives of a Cell*, which won a National Book Award. Four years later, a second collection of Thomas' essays, *The Medusa and the Snail*, was published and won wide aeclaim. Although he no longer writes for *The New England Journal*, Dr. Thomas continues to write for national publications, including a bimonthly column for *Discover*, a monthly science magazine.

The Youngest Science is a fascinating description of Lewis Thomas' medical career, a microcosm of American medicine of the past fifty years. The book is also an eloquent testimony of the scientists' talents as a physician writer. It is highly recommended for physicians, young or old, as well as the general reader.

R. G. Lacsamana, M.D.

● Dr. Lacsamana practiees internal medicine in Daytona Beach. He is editor of the *Stethoscope*, Bulletin of the Volusia County Medical Society.



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THE ICE MAN OF APALACHICOLA

Dr. John Gorrie

Medical history is replete with statistics regarding deaths from fever, and before the middle of the 19th century, little could be done to aid the afflicted. Yellow fever, smallpox, typhoid and scarlet fever were scourges that came in epidemics and caused rapid elevation of body temperature from which, all too often, the victim died.

Even for sunstroke patients, lowering body temperature—when attempted at all—was rough and crude treatment consisting of dunking the victim, often fully clothed, into cold water.[1]



Patented invention

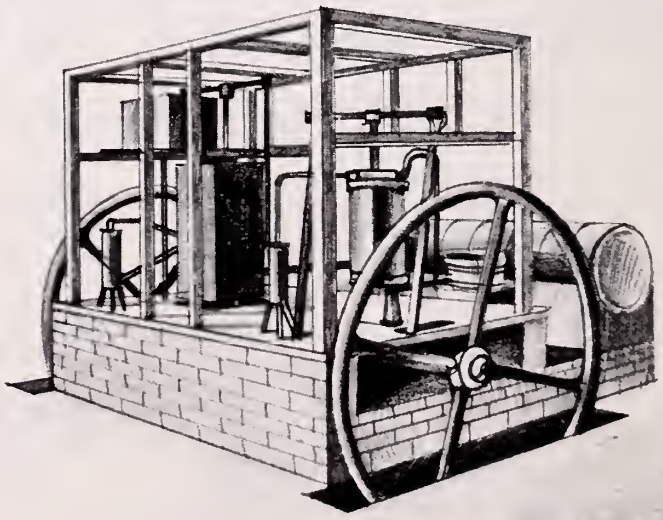
It was, therefore, a significant medical development when, on May 6, 1851, U.S. patent No. 8080 was granted to Dr. John Gorrie of Apalachicola for his mechanical refrigeration technique that perfected the process for making artificial ice.[2]

Dr. Gorrie installed his artificial ice machine in the United States Marine Hospital in Apalachicola;[2] there it came to the attention of other Florida physicians, who began to explore ways of using the ice-making process in preventing and treating yellow fever.[3]

Now a necessity

Today its medical applications are myriad—medications are kept fresh, foods are kept chilled, germs are kept under control, patients are kept comfortable and, often, treatments include applications of ice packs. All these conveniences and treatments—and more—are direct descendants from the historic invention of Dr. John Gorrie.

References: 1. Headquarters: The hospital, chap. 7, in Lee RV, Eimerl S *et al: The Physician.* New York, Life Science Library, Time Inc., 1967, p. 149. **2.** Kane JN: *Famous First Facts,* 3rd ed., New York, The H. W. Wilson Co., 1964, p. 518. **3.** Day SM: *J. Fla. Med. Assoc. 69*:719, 1982.



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- ☐ Gastrointestinal upset—73%

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Patients should be cautioned about the combined effects with alcohol or other CNS depressants and about activities requiring complete mental alertness such as operating machinery or driving a car.

References: 1. Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine*, edited by Jarvik ME; New York, Appleton-Century-Crofts, 1977, p. 316. 2. Feighner JP *et al*: *Psychopharmacology 61*: 217-229, Mar 1979. 3. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

In moderate depression and anxiety

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Please see summary of product information on following page.

LIMBITROL® TABLETS Ⓝ Tranquilizer—Antidepressant
Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of moderate to severe depression associated with moderate to severe anxiety
Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.
Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).
Usage in Pregnancy: **Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage; withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).
Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.
Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.
The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:
Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.
Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.
Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.
Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.
Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.
Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.
Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.
Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.
Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly.
Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.
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New AMA-ERF program provides help for medical students

We are in an era of dwindling federal funds for medical education. According to the AMA Department of Residents Physicians Services, "A modern medical education can cost as much $200,000 and the price tag for a new practice can run as high as $50,000 to $100,000." In a recent *AMA Newsletter*, the Department reported that the majority of medical students are at least $20,000 in debt due to rising tuition and declining federal support.

The American Medical Association Education and Research Foundation (AMA-ERF) has recently addressed this need through the establishment of the AMA-ERF Medical Student Assistance Fund which raises money specifically for student financial aid. The fund began accepting gifts in January, 1983. As with other AMA-ERF gifts, donors may earmark the schools which will receive their donations.

The AMA-ERF Medical Student Assistance Fund is different from the previous AMA-ERF Student Loan Program (suspended in April, 1980) because the fund is not dependent on commercial banks, and does not put the Foundation at risk as a guarantor for loans.

The program is simple. Contributions are earmarked for specific medical schools and funds are sent annually to the deans who distribute these donations to qualified medical students. These funds are separate from the unrestricted Medical School Fund distribution of AMA-ERF. In all cases, students who benefit from the funds will be informed that their assistance was provided by the Foundation. Students interested in applying for assistance should check with the Office of Financial Aid at their school.

AMA-ERF is classified by the Internal Revenue Service as a 501 (c) (3) organization and gifts are tax deductible. The economic pressures of today affect us all and although we are asked for contributions constantly, the dedication of most physicians and their families to the field of medicine keeps AMA-ERF a top priority.

AMA-ERF is the only *national* fund-raising project in the Auxiliary. Awards are presented each year at the AMA-A annual convention to states with the largest overall contribution and the largest contribution per capita.

The FMA Auxiliary has emphasized AMA-ERF since it was founded and has received national recognition on several occasions for outstanding effort.

We are hoping that cooperation from physicians and Auxiliary members will combine to make 1983-1984 a banner year for AMA-ERF in Florida. Certainly, with the greatly inflated cost of medical education, this is a goal worth striving for.

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Cardia Arrhythmias, 1983, Nov. 2-4, Mt. Sinai Medical Center, Miami Beach. For information: Philip Samet, M.D., 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", Nov. 3, Cedars Med. Ctr., Miami. For info.: Francine Andia, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

A Rational Approach to Antibiotic Dosing, November 3, Naples Community Hospital, Naples. For info.: Richard Ellington, M.D., 2872 Davis Blvd., Naples 33940, (813) 775-6200.

Flexible Fiberoptic Sigmoidoscopy In the Diagnosis of Colorectal Disease, November 3-6, Grenelefe Golf and Tennis Resort, Grenelefe. For info.: Edward Kowalewski, M.D., 1290 Avenue of the Americans, New York, NY 10104 (212) 489-7790.

Depressive Disorders '83, Nov. 4, Orlando Marriott Inn, Orlando. For info.: Irving Kolin, M.D., 1502 Lucerne Terrace, Orlando 32806, (305) 843-5333.

Spinal Deformities, Nov. 6-9, Sheraton Bal Harbour, Bal Harbour. For info.: Barry Silverman, M.D., 4300 Alton Road, Miami Beach 33140, (305) 674-2121.

Internal Medicine Update '83, November 7-11, The Colony, Sarasota. For information: Murray A. Grossman, M.D., Upstate Medical Center, Syracuse, NY (315) 473-4467.

Tutorial Course of Instruction in Coronary Care for the Practicing Physician, Nov. 7-12, University of Miami, Miami. For information: Michelle J. Enriquez, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6245.

Infectious Diseases - Diagnosis and Therapeutic Update, Nov. 9, Hyatt Regency Hotel of Tampa, Tampa. For info.: Pascual Bidot, M.D., Centro Espanol Memorial Hosp., 4801 N. Howard Ave., Tampa 33603-1484.

University of South Florida -Sun Bay Community Hospital Surgical Dept. CME Program, Nov. 10, Sun Bay Community Hospital classroom, St. Petersburg. For information: Roy Behnke, M.D., 3030 6th St., South, St. Petersburg 33705, (813) 974-2271 or 823-1122.

Seventh Florida Suncoast Perinatal Conference, Nov. 10-12, Holiday Inn Surfside, Clearwater. For info.: Margo Armstrong, (813) 823-1234, Ext. 3858.

Obstetrical and Gynecological Seminar, Nov. 11, Good Samaritan Hospital, West Palm Beach. For information: William A. Casale, M.D., 321 15th St., West Palm Bch. 33401, (305) 659-0377.

Non-Cardiac Surgery in the Cardiac Patient, Nov. 11, Pinewood Inn, Brooksville. For information: C.J. McGrew Jr., M.D., 4334 Keysville Avenue, Spring Hill 33526, (904) 683-9400.

Clinical Diabetes Update '83, Nov. 12, University of South Florida, Tampa. For information: Robert Farese, M.D., USF, VAR 151, 12901 North 30th Street, Tampa, (813) 971-4500 Ext. 568.

Practical Problems In Cardiovascular Medicine for Family Physicians, November 13, Fountainebleau Hotel, Miami Beach. For info.: Herschel Douglas, M.D., E. Tennessee State University, Box 23320A, Johnson City, TN 37614, (615) 928-6427.

Current Advances In Perinatology, November 13-19, St. Thomas, Virgin Islands. For information: C.R. Bauer, M.D., University of Miami, P.O. Box 016960, Miami 33101, (305) 547-5808.

Diagnosis and Treatment of Pulmonary Embolism/Deep Vein Thrombosis, Nov. 14, St. Mary's Hospital, West Palm Bch. For info.: Gerald J. O'Connor, M.D., St. Mary's Hospital, 901 45th Street, West Palm Beach 33407, (305) 659-1633.

International Symposium on Gynecologic Oncology, Surgery and Urology, Nov. 14-16, James L. Knight International Convention Center, Miami. For information: William A. Little, M.D., Univ. of Miami, (305) 547-6944.

Current Problems in Surgical Pathology with Clinical Correlates, November 15, Good Samaritan Hospital, West Palm Beach. For information: Harvey Cove, M.D., P.O. Box 3166, West Palm Beach 33402, (305) 655-5511.

9th Annual Course In Behavioral Neurology and Neuropsychology, Nov. 16-19, Sarasota Hyatt, Sarasota. For info.: Edward Valenstein, M.D., 2030 NW 71st Street, Gainesville 32605.

Surgical Pathology Correlation Conference, Nov. 17, St. Mary's Hospital Library, West Palm Beach. For information: Hossein Hoghooghi, M.D., St. Mary's Hospital, Dept. of Pathology, 901 45th St., West Palm Beach 33407, (305) 844-6311 Ext. 5190.

Medical Malpractice Prevention Seminar — "Anatomy of a Malpractice Case", Nov. 17, Holiday Inn, Tampa. For information: F. Andia, PIMCO, P.O. Box 40198, Jacksonville 32203, (904) 354-5910.

Current Concepts in the Prevention of Gynecologic Infections, Nov. 17, Andre's Cirtus Hill Restaurant, Hernando. For info.: Dale Osterling, M.D., 316 S. Line Ave., Inverness 32650, (904) 726-5661.

7th Annual Childhood Cancer Treatment Seminar, Nov. 17-19, Caribbean Gulf Resort Hotel, Clearwater. For information: Cindi Butson, Post Office Box 13372, University Station, Gainesville 32604, (904) 375-6848.

Advanced Trauma Life Support, November 17-18, University of Florida, Gainesville. For information: R. Goldberg, American College of Surgeons, (813) 936-2414.

CME Seminars 1983, Cuban Medical Association, Nov. 18, Univ. of Miami School of Medicine, Miami. For information: Manuel Viamonte Jr., M.D., P.O. Box 341016 Coral Gables 33134, (305) 446-9902 or 674-2680.

33rd Annual Postgraduate Seminar — Diabetes Mellitus, Nov. 30-Dec. 2, Mount Sinai Medical Center, Miami Beach. For information: Lee D. Goldberg, M.D., 4300 Alton Rd., Miami Beach 33140 (305) 674-2121.

DECEMBER

Neuro-Opthalmology Course, Dec. 1-3, Univ. of Miami, Miami Beach. For information: Gaby Kressly, University of Miami, P.O. Box 01690, Miami, (305) 326-6099.

Emergencies in Internal Medicine VI, December 1-6, Frenchman's Reef Resort, St. Thomas, Virgin Islands. For information: Division of CME, D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami, (305) 547-6716.

Cardiovascular Disease: Non-Invasive Diagnostic Methods, Dec. 2-4, Bahia Mar Hotel, Ft. Lauderdale. For information: Margaret A. Kleiger, 800-525-8651, Ext. 125.

4th Annual "Interamerican Medical Symposium", Dec. 4-8, Dutch Resort Hotel, Lake Buena Vista. For information: Jose Bocles, M.D., Univ. of Miami, (305) 547-6063.

Non Cemented Ceramic Total Hip Replacement, Dec. 6, Sheraton Bal Harbour, Bal Harbour. For information: Dennis W. Cahill, University of Miami, P.O. Box 016960, Miami, (305) 547-6996.

Controversies In Rheumatology, Dec. 6-8, Hotel Royal Plaza, Lake Buena Vista. For info.: J.E. Poiley, M.D., 615 E. Princeton Street, Orlando 32803, (305) 896-8861.

Ultrasound As Used In Modern Ob/Gyn, Dec. 7-11, Miami Beach. For information: Patti Mundy, University of Miami, P.O. Box 016960, Miami 33101, (305) 547-6944.

Clinical Allergy and Immunology for the Practicing Physician, December 8-10, Buena Vista Palace, Lake Buena Vista. For info.: Richard F. Lockey, M.D., (813) 972-2000, Ext. 597.

Surgery and Rehabilitation of Complex Problems of Upper Limb, Dec. 9-11, Bal Harbour. For info.: JoAnn Harris, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6200.

Practical Applications: Behavioral Medicine and Neuropsychology, December 10-11, Northwood Medical Center, West Palm Beach. For info.: Robert K. Alsofrom, Ph.D., Northwood Medical Ctr., 2617 N. Flagler Drive, Suite 505, West Palm Beach 33407, (305) 832-8444.

Tutorial Course of Instruction in Coronary Care for the Practicing Physician, Dec. 12-17, University of Miami. For info.: Michelle J. Enriquez, University of Miami, Post Office Box 016960, Miami 33101, (305) 547-6245.

The First 30 Minutes: The Boston City Hospital Approach to Medical and Pediatric Emergencies, Dec. 27, Buena Vista Palace Hotel, Lake Buena Vista. For info.: R. Levin, M.D., Boston City Hospital, 818 Harrison Ave., Boston, MA 02118, (617) 424-5421.

3rd Annual Current Concepts In Pain Management, A Comprehensive and Practical Review, December 26-30, Steamboat Springs, Colorado. For info.: Donald A. Berman, M.D., 3301 Johnson Street, Hollywood 33021, (305) 989-6650.

JANUARY 1984

Oral Pathology Review Histology, Differential Diagnosis and Management, Jan. 9-13, 1984, Univ. of Miami. For info.: Division of CME D-23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101, (305) 547-6716.

16th Annual Postgraduate Seminar: Pediatric and Adult Urology, January 18-21, Bal Harbour. For info.: Charles M. Lynne, M.D., Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6630.

Treatable Life Threatening Cardio-Pulmonary Episodes, Jan. 20-21, Diplomat Hotel, Hollywood. For information: Marvin L. Meitus, M.D., 4300 Alton Road Miami Beach 33140, (305) 674-2121.

Continuing Education In Pediatrics, January 22-26, Diplomat Hotel, Hollywood. For information: Donald H. Altman, M.D., 6125 SW 31st Street, Miami 33155, (305) 666-6511.

9th Annual Review and Practical Advances in Pathology, Jan. 23-27, Bal Harbour. For info.: Marie Valdes-Dapena, University of Miami, P.O. Box 016960, Miami 33101, (305) 325-6437.

Tutorial Course on Instruction in Coronary Care for the Practicing Physician, Jan. 23-28, Univ. of Miami. For info.: Michelle J. Enriquez, University of Miami, Post Office Box 016960, Miami, (305) 547-6245.

6th Annual Walt Disney World Pulmonary Wintercourse, Jan. 26-29, Hotel Royal Plaza, Lake Buena Vista. For information: Milton Braunstein, M.D., 5526 Arlington Road, Jacksonville 32211, (904) 743-2933.

Round Table Day, January 27, Diplomat Hotel, Hollywood. For information: D.H. Altman, M.D., 6125 SW 31st St., Miami 33155, (305) 666-6511.

Oculoplastic Symposium 1984, Jan. 28-Feb. 4, Virgin Islands. For info.: Lawrence B. Katzen, M.D., 2889 Tenth Ave. N., Lake Worth 33461, (305) 964-0707.

Pediatric Nephrology Seminar XI: Neonatal Kidney & Fluid/Electrolytes II, Jan. 29-Feb. 2, Bal Harbour. For info.: P. Seidler, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 325-6726.

FEBRUARY

Breast Disease Update (II), February 1-5, Hilton at Walt Disney World Village, Lake Buena Vista. For information: Lourdes Fuentes, 4300 Alton Road, Miami Bch. 33140, (305) 674-2424.

2nd Annual Interventional Neuroradiology Seminar, Feb. 5-8, Walt Disney World Village Plaza, Lake Buena Vista. For info.: Charleen Krissman, 12901 North 30th Street, Tampa 33612, (813) 974-2538.

International Medicine 1984, February 5-10, Sheraton Bal Harbour, Bal Harbour. For information: Jose Bocles, M.D., Univ. of Miami, Post Office Box 016760, Miami 33101, (305) 547-6063.

3rd Symposium on Burn Care, Feb. 10-11, Sheraton World, Orlando. For information: Hal Bingham, M.D., Box J-233, J. Hillis Miller Health Center, Gainesville 32610, (904) 392-3711.

Florida Midwinter Seminar in Ophthalmology, Feb. 13-15, Lake Buena Vista. For info.: Gaby Kressly, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 326-6099.

Tutorial Course of Instruction in Coronary Care for the Practicing Physician, Feb. 13-18, Univ. of Miami. For information: Michelle J. Enriquez, Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6245.

Florida Midwinter Course in Otolaryngology, February 16-18, Lake Buena Vista. For info.: Gaby Kressly, Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 326-6099.

Vail Symposium on Intensive Care, Feb. 18-25, Vail, CO. For info.: Sonja Craythorne, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6411.

Winter Conference on Principles of Practice Management, Feb. 18-25, Vail, CO. For info.: Sonja Craythorne, Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6411.

Symposium on Parkinson Disease, Feb. 20-21, Miami Beach. For information: D. Ram Ayyar, M.D., University of Miami, Post Office Box 016960, Miami 33101, (305) 547-6732.

Conference on the Beach, Feb. 20-25, Daytona Hilton, Daytona Beach. For info.: R.W. Dodd, M.D., Post Office Box 1990, Daytona Beach 32015, (904) 258-1584.

Neurological Update 1984, Feb. 22-24, Miami Beach. For information: D. Ram Ayyar, M.D., Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6732.

Pediatric Dermatology Seminar XI, February 23-26, Doral Beach Hotel, Miami. For info.: Guinter Kahn, M.D., 16800 NW 2nd Ave., N. Miami Bch. 33169, (305) 652-8600.

MARCH

2nd Annual Clinical Management of the Elderly Patient for the Practicing Physician, March 1-3, Americana Dutch Inn, Orlando. For information: L. Gregory Pawlson, M.D., (202) 676-4269.

Dedication Ceremony and Symposium — Regional Oncology Center, March 2-3, Hilton Hotel, Daytona Beach. For information: H. Kerman, M.D., 570 Memorial Circle Ormond Beach, (904) 672-1852.

Tenth Annual Conference in Anesthesiology: Special Ten Year Anniversary, March 3-10, Vail, CO. For information: Sonja Craythorne, University of Miami, P.O. Box 016960, Miami 33101, (305) 547-6411.

16th Annual Teaching Conference In Clinical Cardiology, March 7-10, Sheraton Bal Harbour, Bal Harbour. For info.: Michael Gordon, M.D., Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6491.

Advances In Improvements in Hernia Surgery, March 15-17, Doral Beach Hotel, Miami Beach. For info.: Arthur I. Gilberg, M.D., 6615 Miami Lakes Dr., East, Miami Lakes 33014, (305) 624-7081.

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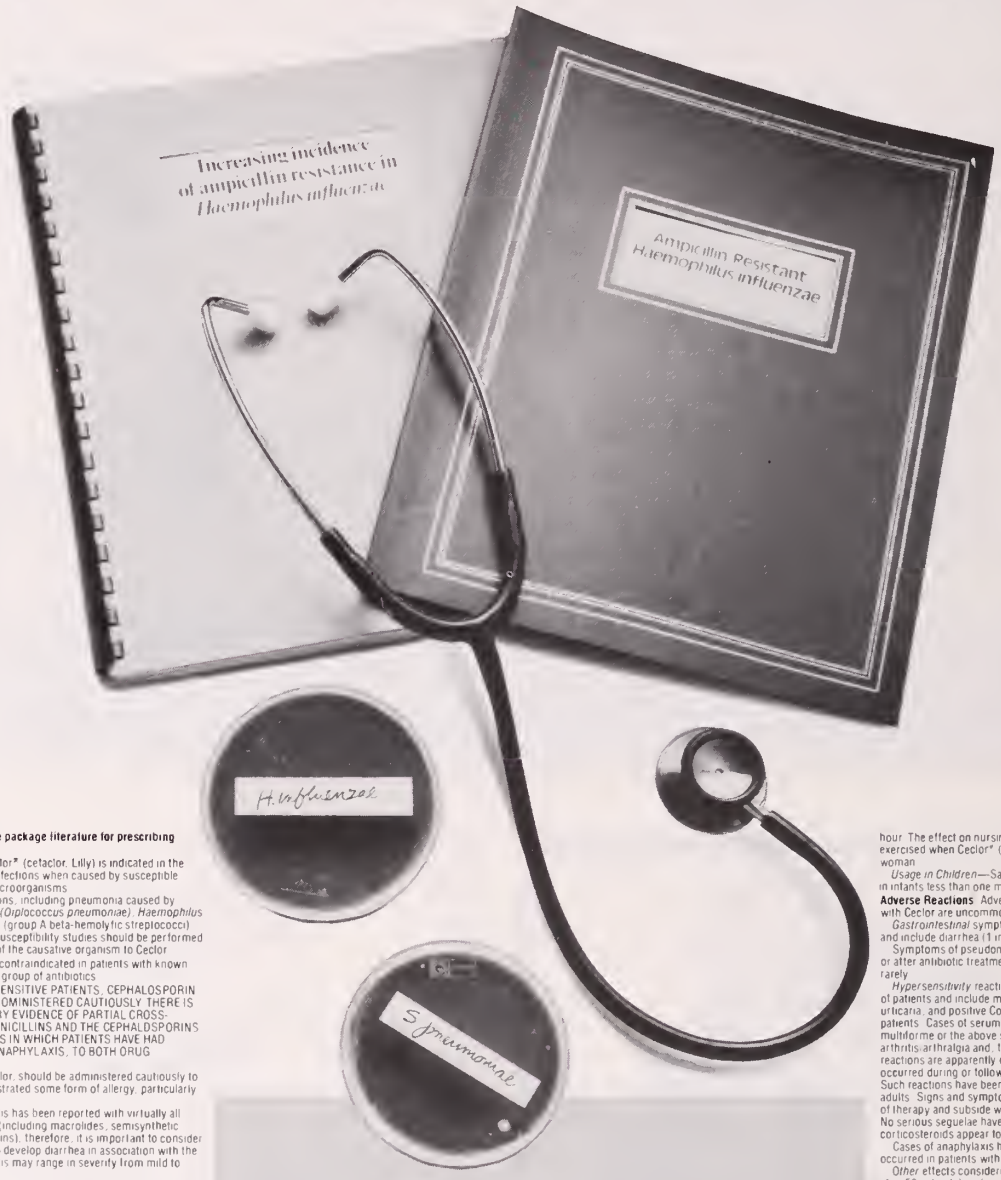
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Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae* and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings. IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions*—If an allergic reaction to Ceclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip; USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers—Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor® (cefaclor, Lilly) is administered to a nursing woman.

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions. Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations of SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[061782R]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

References

1. Antimicrob. Agents Chemother., 8:91, 1975
2. Antimicrob. Agents Chemother., *11*:470, 1977
3. Antimicrob. Agents Chemother., *13*:584, 1978
4. Antimicrob. Agents Chemother., *12*:490, 1977
5. Current Chemotherapy (edited by W. Siegenthaler and R. Luthy), II:880. Washington, D.C.: American Society for Microbiology, 1978.
6. Antimicrob. Agents Chemother., *13*:861, 1978.
7. Data on file, Eli Lilly and Company.
8. Principles and Practice of Infectious Diseases (edited by G.L. Mandell, R.G. Douglas, Jr., and J.E. Bennett), p. 487. New York: John Wiley & Sons, 1979.

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

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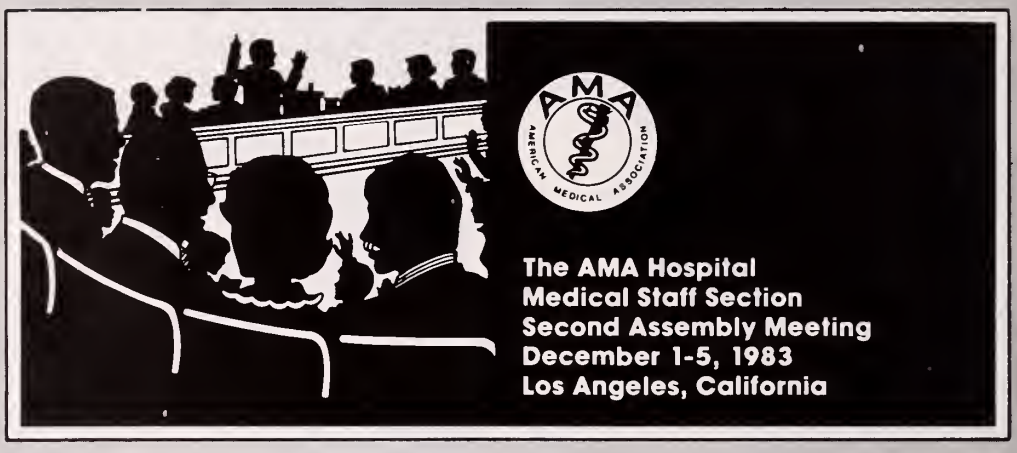
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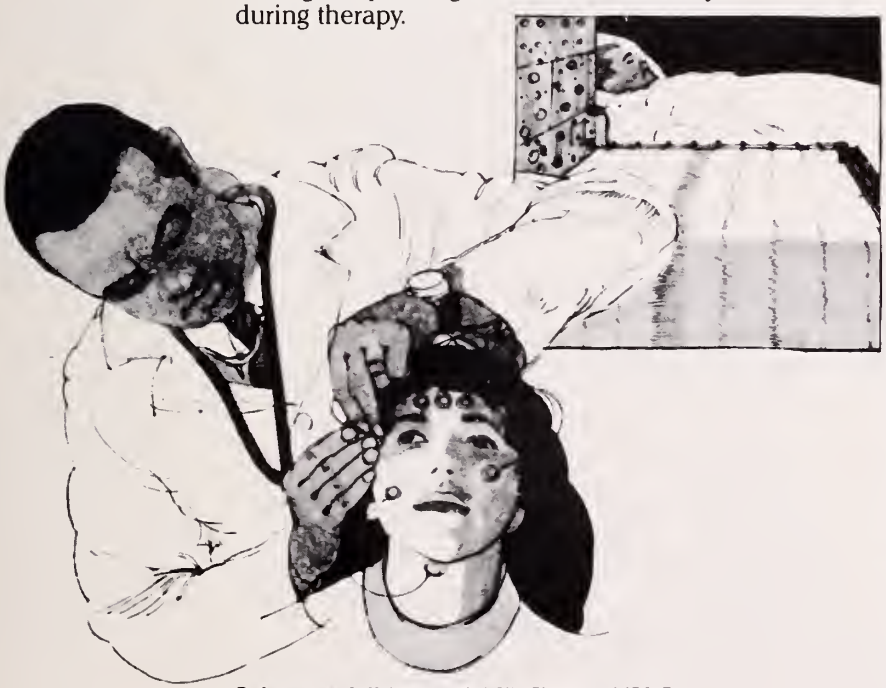
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References: 1. Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, e.g., excitement, stimulation and hyperactivity.

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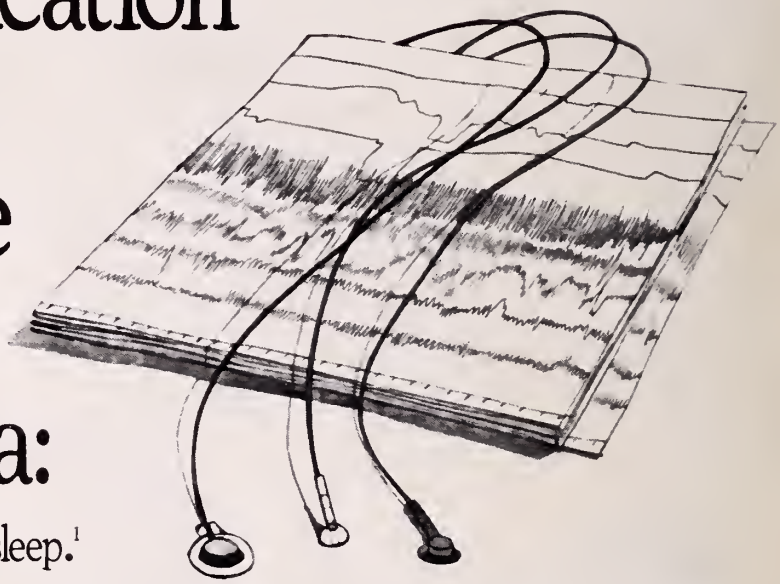
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Summary of the FMA Board of Governors Meeting October 27-28, 1983

The following is a summary of the major actions taken by the Board of Governors at its meeting October 27-28, 1983.

THE BOARD:

PROFESSIONAL LIABILITY

In accordance with Chapter IV, Section 3, of the FMA Bylaws, the Board voted unanimously to call the House of Delegates into Special Session on Saturday, January 28, 1984, beginning at 10:00 a.m. at the Sheraton St. Johns Place in Jacksonville. The meeting is being scheduled to coincide with the 1984 FMA Leadership Conference, January 27-29, 1984. The purpose of the meeting is to consider a report and recommendations from the Board of Governors to the House regarding the Association's continued efforts to resolve the professional liability crisis in Florida.

The agenda for business to come before the House will be limited to the professional liability issue and no other items will be considered. Attendance will be restricted to members of the House of Delegates, those with privilege of the floor, and other FMA members, FMA and county medical society staff and FMA consultants.

Since 1975 members of the FMA and others, at great expense in time, effort and money, have sponsored comprehensive tort reform legislation. The reforms that have been enacted by the Legislature since 1975 have either been declared unconstitutional by our State Supreme Court or even worse, ignored by the Judiciary. During the 1983 Session of the Florida Legislature, the FMA introduced broad based tort reform proposals designed to help resolve the professional liability crisis in Florida on a long term basis. The Florida Senate overwhelmingly voted in favor of HB 1182 which included many of the Association's proposals. However, the Speaker and leadership of the House of Representatives refused to allow the full House an opportunity to act when there was a prevailing sentiment in the House to adopt the Senate version. The Board of Governors at its meeting in June, reviewed the actions of the 1983 Legislature and carefully evaluated the Association's future activities in resolving the professional liability problem. The House of Delegates and the Board of Governors, on behalf of the physicians of Florida and the patients they serve, determined that resolution of the professional liability crisis shall remain a top priority.

The Board, in addition to the analysis of the actions of the 1983 Legislature, considered the feasibility of reintroducing legislation during the 1984 Session. The Board requested that the FMA Executive Committee meet jointly with the Committee on Professional Liability and the Association's legislative consultants to conduct an in-depth analysis of the actions of the 1983 Legislature on the FMA tort reform proposals and to submit recommendations to the Board regarding the Association's future activities in resolving the professional liability problem.

The Board further requested that a public opinion survey be conducted among registered voters in the state of Florida by FMA Public Relations Consultant, Mr. Roy Pfautch of Civic Service, Inc., St. Louis, Missouri. The purpose of the survey was to measure the potential for public support of alternative initiatives in addressing the professional liability problem outside the legislative process.

At its meeting in October, the Board considered the report and recommendations resulting from the Joint Meeting of the Executive Committee and Professional Liability Committee and received a report from Mr. Roy Pfautch on the results of the public opinion survey. The recommendations that will be submitted to the House for consideration at its Called Meeting regarding the Association's continuing efforts to resolve the professional liability crisis on a long term basis were adopted unanimously by the Board of Governors.

1982 FMA ASSESSMENT

Authorized an extension of the deadline of October 31 for payment of the 1982 FMA assessment until December 31, 1983, and directed that the 1984 dues received from members who have not paid the assessment be held in escrow until the assessment is paid and further that those members who have not paid the assessment by December 31 will be automatically removed from the FMA membership rolls.

FMA ELECTION PROCEDURES

Recommended to the House of Delegates a modification to the FMA Bylaws regarding the Association's election procedures to conform to those procedures currently utilized by the AMA.

FMA AWARDS

Approved the following FMA awards to be continued for 1984 as part of the FMA's public relations activities:

Medical Journalism Awards
Medical Speakers' Awards
Medical Malpractice Prevention Award

Good Samaritan Award

Approved the criteria for selecting the recipient of the Harold S. Strasser, M.D., Good Samaritan Award established by the House of Delegates at its meeting in May 1983. The criteria and requests for nominations for this and other Association awards will be sent to all component county medical societies, specialty groups and others as appropriate.

FMA Award Procedures

To help expedite the business of the House, the Board approved presentation of various FMA awards during the Annual Meeting as follows:

First House of Delegates
The A.H. Robins Company Award for Outstanding Community Service by a Physician
Distinguished Layman Award
Medical Malpractice Prevention Award
Medical Speakers' Awards
Good Samaritan Award
Medical Journalism Awards
JFMA Awards for County Medical Society Bulletins — Include in Delegates' Packets and acknowledge but no presentations at this time. The awards to be presented at the Editor's Dinner.

General Session
Scientific Exhibit Award Announcements

Second House of Delegates
Certificate of Merit
Certificate of Appreciation

The Board further recommended to the Speaker that the House of Delegates convene at 3:30 p.m. on Wednesday instead of 4:30 p.m. and that more prominence be given to the Presidental Address.

FUTURE ANNUAL MEETING DATES

Reconfirmed on a definite basis the FMA Annual Meeting dates scheduled at the Diplomat Hotel for May 1-5, 1985 and May 13-17, 1987, and that the May 14-18, 1986 and May 11-15, 1988 Annual Meeting dates be scheduled on a tentative basis in the Central Florida area.

COUNCIL ON SPECIALTY MEDICINE, COMPOSITION & FUNCTIONS

Approved a report and recommendations regarding the composition and and function of the FMA Council on on Specialty Medicine:

- That the current criteria for appointment to the Council and its functions remain unchanged.
- That a recommendation be submitted to the House of Delegates that the FMA Bylaws be amended to provide that each FMA recognized specialty group be allowed one vote in the House of Delegates.
- That the FMA approved in principle to offer to provide administrative services to recognized specialty groups through letter agreement on a cost reimbursement basis and requested that a proposal be submitted to the Executive Committee at its next meeting as to how this function might best be implemented.

OPTOMETRIC DRUG PRESCRIBING

Authorized continued financial assistance to the Florida Society of Ophthalmology in the legal procedures regarding prescribing of drugs by optometrists.

ORGAN HARVESTING

Approved support of the Florida Society of Ophthalmology by participating with the Society as a friend of the court in a suit to protect the authority of medical examiners for the harvesting of organs including corneas, as currently provided under Florida laws. The Board recommended that the harvesting of organs be done in the most cosmetic manner possible and referred this issue to the Council on Legislation for appropriate action as may be indicated in the Legislature.

FMA RELATIVE VALUE STUDIES

Approved a revision of the 1982 Relative Value Studies and directed that the updated RVS be provided at no charge to those members of the FMA requesting copies prior to publication and that after the RVS is published that it be provided to members at cost.

1984 FMA BUDGET

Approved the proposed budget for 1984 with a total income and expenditures in the amount of $3,245,000.

COUNCIL AND COMMITTEE REPORTS

AD HOC COMMITTEE ON THE COST OF MEDICAL CARE

Statewide Business Coalition

Authorized the FMA to pursue the development of a statewide business coalition to serve as a liaison between the business and medical communities on an ongoing basis.

Meetings With Organized Business Leaders

Endorsed FMA representatives meeting with the organized business leaders to discuss ways for dealing with health care cost containment and to seek their support for the Florida Medical Association's efforts in establishing a statewide peer review organization and the Association's tort reform efforts as mechanisms for containing health care costs.

AMA DELEGATES

Resolution Commending W. Harold Parham, D.H.A.

Enthusiastically adopted a resolution to be submitted by Florida's AMA Delegates to the AMA House of Delegates at its meeting in December commending Dr. W. Harold Parham, Executive Vice President of the FMA, upon his retirement in 1984 and acknowledging medicine's indebtedness to this dedicated, devoted, energetic and talented friend of medicine who for 35 years has toiled tirelessly on behalf of the great profession which has adopted him and which he so dearly loves.

FLAMPAC

Board Composition

Approved a modification to the FLAMPAC Bylaws to allow for an expansion of the Board of Directors to 34 members, the majority of which shall be physician members of the FMA.

Local Support Committees

Approved an amendment to the FLAMPAC Bylaws for selection of members and Chairmen of local FLAMPAC Support Committees to provide:

> "That members of the local FLAMPAC Support Committee shall be chosen by local FLAMPAC members. The number of physicians and spouses serving on the Committee shall be determined by the local FLAMPAC Support Committee. The Chairman of the local FLAMPAC Support Committee shall be nominated by the county medical society president and approved by the FLAMPAC Board of Directors; and shall serve for a period of one year."

COUNCIL ON LEGISLATION

Reviewed the report of the Council on Legislation regarding medical issues expected to be considered during the 1984 Legislative Session including:

Chiropractic

- Access to hospital outpatient diagnostic facilities
- Injection of food substances
- Funding of chiropractic school

Pharmacy Self-Care Consultant

Legislation which would allow pharmacists to prescribe drugs from a formulary without a physician's prescription or diagnosis.

Nurse Anesthetists' Hospital Staff Privileges

Legislation which mandates hospital staff privileges for nurse anesthetists in the same manner as M.D.s and D.O.s.

Elective Surgery Performance Records

Legislation which requires hospitals and ambulatory surgery centers to maintain and update records on elective surgery.

Optometric Drugs

Legislation allowing optometrists to prescribe and use drugs for treatment of eye disease.

Health Care Cost Containment

No specific proposals have surfaced but issues discussed for consideration by the Florida Legislature include:

- Exclusive provider organizations
- Hospital rate regulations
- Peer review of physicians' fees by Department of Professional Regulation

Sunset Review

- Sunset review of licensure of lay midwives
- Certification of radiological technologists' laws

The FMA's position on these and other medical issues to be addressed during the 1984 Session will be considered by the Board at its meeting in January.

Identification of Positive Issues

Approved the recommendation that the FMA identify a legislative issue or issues that would allow the Association to support measures having a positive benefit for the health care of the citizens of Florida.

COUNCIL ON MEDICAL ECONOMICS

Uniform Health Insurance Policies

Approved the proposal that health insurers should be required to reimburse physicians for all procedures that the attending physician determines can be safely and appropriately performed on an outpatient basis but are currently being reimbursed only on an inpatient basis.

Hospital Cost Containment Board

Reaffirmed the FMA's continued opposition to the submission of physicians' charge data to the Hospital Cost Containment Board.

Second Opinions

Expressed continued opposition to mandatory second opinions and reaffirmed the position that second opinions for elective surgery should be at the option of the patient.

Hospital User Fees

Expressed continued opposition to a physician user fee for the use of hospital equipment and services as such an expense would have to be passed on to the patients and would cause additional costs to hospitals for record keeping and reports.

Certificate of Need

Reaffirmed opposition to the Certificate of Need law as well as any reinstatement of authority over the CON Program by local health councils and requested the Council on Legislation to support efforts to eliminate funding for CON activities by local health councils. The Board also recommended that the American Medical Association intensify its efforts to defeat the national health planning legislation now being considered by Congress.

(S.B. 216) Group Health Insurance Plan

Determined to seek repeal of S.B. 216 enacted during the 1983 Legislative Session which allows for participants in a government group health insurance program who discover that they are overcharged by a hospital, physician, clinical lab and other health care providers to receive a refund of 50 percent of any amount recovered as a result of such overcharge up to a maximum of $1,000 per admission.

Single Statewide PRO

Reaffirmed the previous action that the FMA through the Florida Medical Foundation or other appropriate entity apply for designation as a statewide PRO for the state of Florida. The Board further approved the concept that the activities of the statewide PRO be implemented through component county medical society branches located appropriately throughout the state.

Medical Consultants — Division of Workers' Compensation

Requested nominations from FMA recognized specialty groups of the names of physicians to be submitted to the Workers' Compensation 3-Member Panel for approval as consultants to the office of Medical Services Division of Workers' Compensation. It was felt that the appointment of these consultants would be of assistance in helping to curb the alleged problem of questionable billing practices on the part of some physicians.

Uniform Informed Consent Form

Approved the uniform informed consent form as developed by the Council on Medical Economics in cooperation with the Florida Hospital Association and determined that a copy of this form be disseminated to county medical societies with an explanation that it is important for the potential users to recognize that while it has been developed as a uniform informed consent form, it is not necessarily more desirable than the one they are currently using, and that they may wish to have it reviewed by their own legal counsel.

COUNCIL ON MEDICAL SERVICES

Prescription Abuse Data Synthesis (PADS)

Authorized the FMA to actively participate in the PADS project and assist the State of Florida in the development of an intervention policy designed to identify and assist non-criminally involved physicians such as the impaired physician, the dated physician and the duped physician as described in the PADS model. The Board also authorized the FMA Committee on Substance Abuse and the Impaired Physicians Committee to recommend policy on intervention to the PADS project.

Methodone Treatment

Recommended to the Secretary of the Department of Health and Rehabilitative Services that he consider in consultation with the FMA, the appointment of a committee to review and make recommendations regarding existing state Methodone regulations especially as they pertain to licensing and operating a Methodone program.

"Opium" Perfume

Requested Florida's Delegates to the AMA to submit a resolution at the 1983 Interim Meeting of the AMA House of Delegates which expresses great concern over the highly promotional advertising campaigns being conducted by the manufacturers of certain perfumes and colognes directed at young people which implies that illicit drug experience is exciting and desirable:

RESOLVED, That the AMA notify the management of E. R. Squibb & Sons, Inc. Pharmaceuticals of its strong objection to the advertising campaign on "Opium" perfume; and therefore be it further

RESOLVED, That the AMA express strong objection to the management of Pippo, Inc., of the "Stash" advertising campaign, House of Dinard, Inc., of the "Sinsemalla" advertising campaign and Cocaine International of the "Cocaine" advertising campaign.

Florida High School Activities Form

Endorsed the Florida High School Activities Form and recommended to the Florida High School Activities Association that it be used throughout the state of Florida.

Cardiopulmonary Resuscitation

Recommended to the Department of Education that it implement as part of the public school system curriculum a cardiopulmonary resuscitation course.

Measles Immunization

Recommended to the Department of Health and Rehabilitative Services and the Department of Education and the Council on Post-Secondary Education that proof of measles immunization be a requirement for entrance to colleges in Florida.

Public Safety

Requested that the FMA President and others as deemed appropriate consult with the Secretary of the Department of Health and Rehabilitative Services regarding the FMA's concern regarding state laboratory charges for cultures for Gonorrhea, Tuberculosis and other communicable diseases and that there should be no charge for these tests as they are part of the State's public health responsibility in monitoring and controlling communicable diseases.

Environmental Personnel

Recommended to the Secretary of the Department of HRS the need to recruit and train environmental protection personnel including medical professionals to ensure environmental issues are properly handled.

COUNCIL ON SCIENTIFIC ACTIVITIES

FMA Annual Meeting Scientific Program

Approved a symposium, "The Health of the Public" to be held in conjunction with the FMA 1984 Annual Meeting on

FMA Annual Meeting Scientific Program (cont'd.)

Friday, May 4 from 9:00-10:30 a.m. and requested that no other scientific programs be held during that time. The Board also requested that other groups scheduling meetings on Friday morning be requested to conclude them by 8:45 a.m. in order to encourage attendance at the symposium.

Accreditation Manual/ CME Booklet

Approved publication of an accreditation manual which addresses the requirements of the ACCME *Essentials* and also the publication of a booklet for FMA members which outlines requirements and procedures relative to the FMA's mandatory program of continuing medical education.

COUNCIL ON SPECIALTY MEDICINE

Specialty Society Legislative Programs

Reviewed recommendations from FMA recognized specialty groups regarding FMA support for specialty society legislative objectives and referred these to the Council on Legislation for consideration in developing the FMA's legislative priorities for 1984.

Community Hospital Education Act

Expressed support for maintaining the Community Hospital Education Act without changes in the law or reductions in funding.

Blood Donor System

Expressed opposition to changes in the current blood donor system currently being used by blood banks that would allow designation of specific persons to receive donated blood.

Insanity Plea

Received the American Psychiatric Association's statement on the insanity defense and referred it to the Council on Legislation for appropriate action. The APA is making an effort to change the commitment standards and establish different release standards for persons who have been acquitted for crimes by reason of insanity.

Ineffective Drug List

Requested the AMA Diagnostic and Therapeutic Technology Assessment Department (DATTA) to review the list of drugs banned for Medicare/Medicaid payment to determine whether the drugs should be categorized as ineffective. The Board reviewed a listing of drugs that had been banned for Medicare/ Medicaid payment as of 1982 as a result of being classified as drug products that lack substantial evidence of effectiveness. It was felt that many of the drugs on the list are effective and should be reviewed by the AMA.

COMMITTEE ON IMPAIRED PHYSICIANS

Impaired Physicians Program Funding/ Medical Director

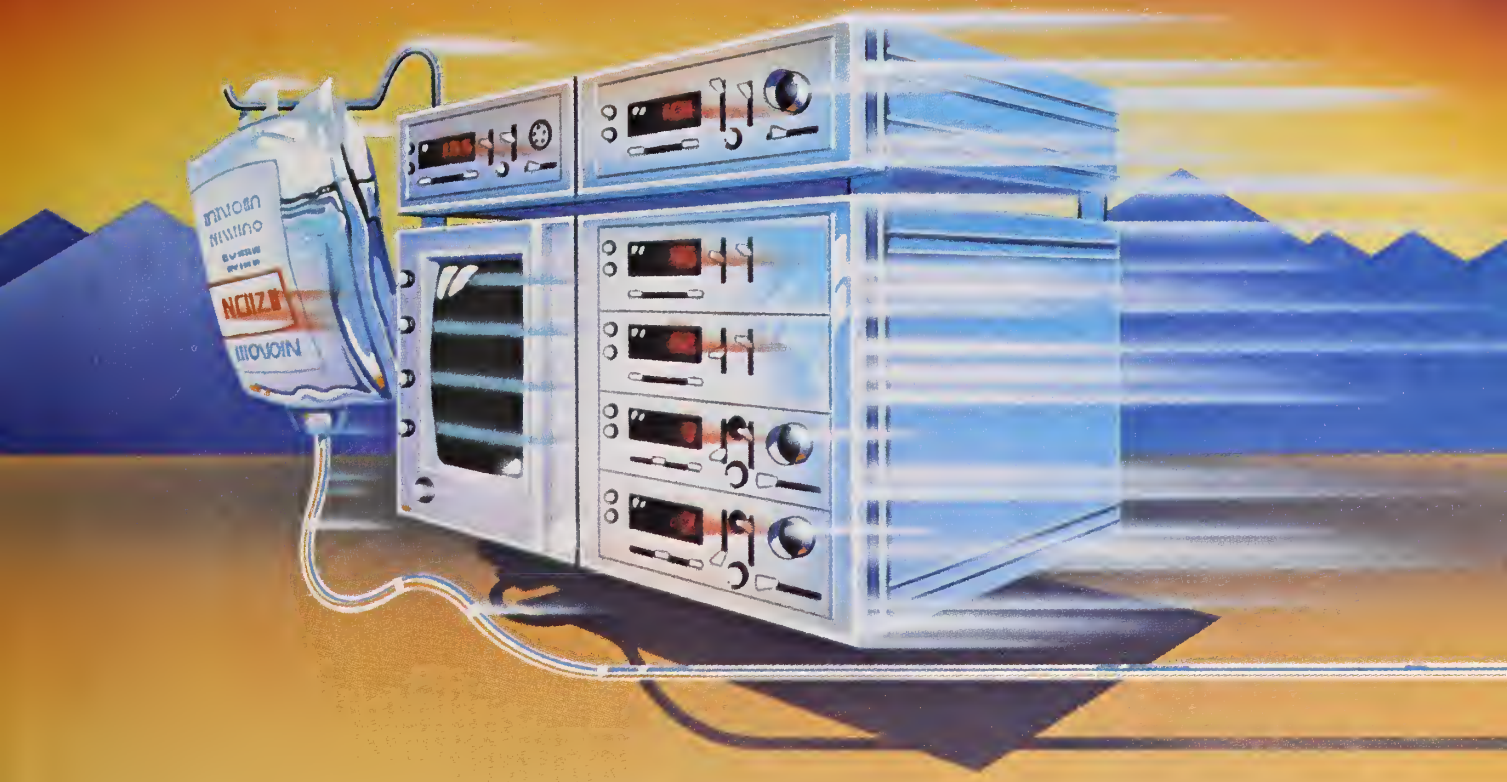
The Board enthusiastically approved the concept of a full-time medical director for the Impaired Physicians Program and determined that the FMA contribute an amount up to $120,000 for 1984 for the Program in order to allow for the employment of a full-time medical director. The Board further recommended to the House of Delegates that $10 annually of the next FMA dues' increase be allocated for the Impaired Physicians Program.

Goals and Objectives

The Board approved the Goals and Objectives of the Committee on Impaired Physicians for 1983-84 including:

- Identifying and securing additional methods of funding for the program and the employment of a full-time medical director;
- Provision of adequate benefits for treatment of chemical addiction included in the appropriate insurance programs sponsored by the FMA;
- Promotion and creation of impaired physicians committees in at least 10 additional FMA county medical societies;
- Training of additional physicians as qualified intervenors;
- Provide up-to-date scientific information concerning chemical addiction to members of the FMA; and
- Keep the medical profession in Florida advised of the status of the Impaired Physicians Program and new developments.

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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION, INC

NOVEMBER 1983, Vol. 70, No. 11

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This month's cover of *The Journal* is designed and painted by Andre J. Renard, M.D., a Jacksonville Plastic Surgeon and Cover Editor.

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FOURTH ANNUAL
Interamerican Medical Symposium
"CURRENT THERAPIES IN INTERNAL MEDICINE"

December 4-8, 1983
Dutch Resort Hotel, Walt Disney World Village
Lake Buena Vista, Florida

This fourth Interamerican Medical Symposium will be devoted to a review of the newest management of selected medical problems frequently encountered by practicing physicians. Based on the latest insights into mechanism of diseases, concepts and techniques for patient management will be stressed. A distinguished faculty from the three Americans will also cite personal experiences in the use of drugs for common medical disorders and free discussion among the speakers as well as close interaction with the audience will be encouraged. All presentations and discussions will be offered in English and Spanish with simultaneous translation.

Pulmonary Diseases
- Corticosteroids
- Respiratory Infections in the Immunocompromised Host
- Pharmacotherapy of Bronchial Asthma

Infectious Diseases
- Initial Treatment of Serious Infections
- Bacterial Pneumonias
- Newer Antibiotics

Gastroenterology and Hepatology
- Therapeutic Endoscopy
- Prophylaxes and Vaccines for Hepatitis
- New Therapeutic Agents
- Gall Bladder Stone Dissolution

Renal Diseases
- Urinary Tract Infections
- End-Stage Renal Disease
- Renal Transplantation
- Continuous Ambulatory Peritoneal Dialysis vs. Hemodialysis

Endocrine Diseases
- Hyperthyroidism
- Self Monitoring of Diabetes
- New Infusion Devices in Diabetes

Hematology and Oncology Diseases
- Newer Hormonal Regimens
- Oncogenic Viruses and Vaccines
- Breast Cancer
- Bone Marrow Transplantation

Cardiac Diseases
- Calcium Channel Blockers
- Ventricular Arrhythmias
- Beta Blockers and Coronary Artery Disease
- Medical vs. Surgical Management of Coronary Artery Disease

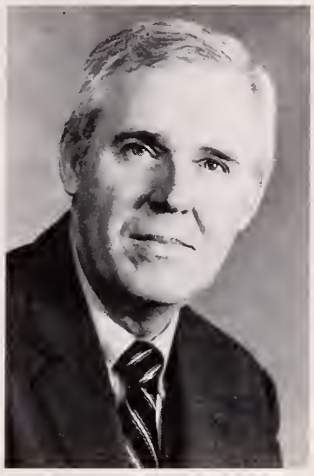
Arterial Hypertension
- Controversies in Medical Treatment
- Convertine Enzyme Inhibitors
- Diuretics vs. Beta Blockers
- Hypertensive Crisis

The University of Miami School of Medicine designates that continuing medical education activity for 17 hours in Category I of the Physician's Recognition Award of the American Medical Association. This program has been reviewed and is acceptable for 17 prescribed hours by the American Academy of Family Physicians.

Registration: $200 before October 30, 1983 — $250 after October 30, 1983

For registration and information write to: Jose S. Bocles, M.D., Department of Medicine (R760), University of Miami School of Medicine, P.O. Box 016760, Miami, FL 33101, phone (305) 547-6063.

Auxiliary on the move



At the Annual Meeting of the Florida Medical Association in May 1983, I was invited to meet with Mrs. S. Bruce Gerber (Priscilla), President-Elect and Mrs. John M. Canakaris (Georgia), Public Relations Chairman of the Florida Medical Association Auxiliary to discuss the goals of our two organizations for the year under our respective leadership. The three of us shared the concern that the physician's image is at an all-time low and medicine is taking the rap for all of the ills of the health care industry. The Auxiliary adopted its goals for the year as outlined in Mrs. Gerber's acceptance speech at the May meeting when she stated, "yes, I'm ready" and asked the auxilians to "let the public know what we are and what we do."

The Board of Governors of the Florida Medical Association has supported the concept of improving the physician's image and authorized the production of a videotape for presentation by the Auxiliary to the media and other public and community groups to tell the story of the Auxiliary activities and the benefits to many citizens throughout the state.

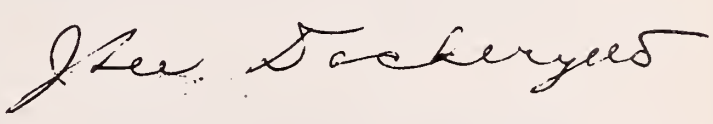
In a short period of time, the videotape became a reality and formed the important framework for statewide presentations to the media on October 4, 1983. The story is being told about the 6,000 members of the Florida Medical Association Auxiliary who are involved in more than 250 programs that benefited 250,000 citizens in Florida last year.

But sadly, some of the physicians of Florida have not been aware of the Auxiliary and its activities. Only 6,000 spouses of the 14,000 members of the Florida Medical Association are members.

We must increase the strength and quality of our participation in professional and community activities.

We, the medical family, must regroup and take the offensive to regain the confidence and respect of the public. Through increased membership and participation in the programs of the Auxiliary, every medical household can do their part in getting the "House of Medicine" in order. We must stand tall and work for the good of our communities and not just for the health care issues only. You, the spouse, are the key to our success. Your love, understanding, confidence, encouragement and action will provide us with the enthusiasm and initiative to get medicine "of the ropes." From retreating to advancing forward, we will unite in a common goal to overcome apathy and despair and will become vibrant ambassadors of our great profession. Together we can, and we must.

"They who remain silent have often said all they know."
Anonymous



The AMA puts current medical



The first nationwide medical information network brings a new dimension to the way in which physicians and other health care professionals keep abreast of the latest knowledge in their profession.

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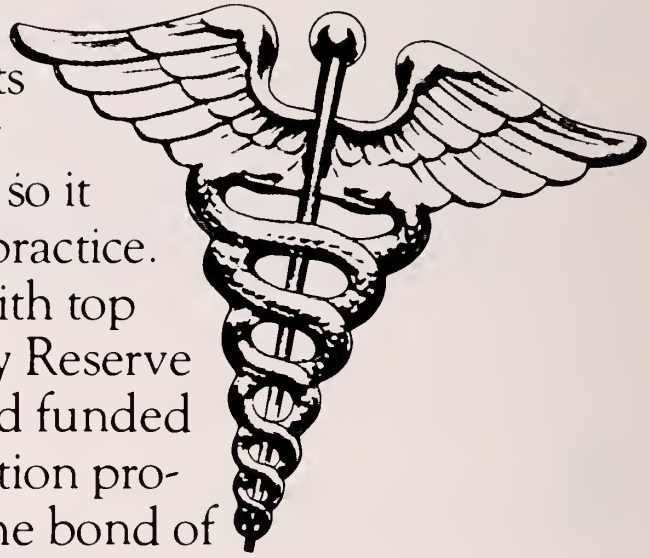
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EDITORIAL

Symbiosis of Physicians and Computers

Computers are powerful extensions of man's intellect but they are inexplicable to most people and consequently we stand in awe of them. Computers are the products of explicable factors and with understanding of these factors, awe may fade though wonder remains.

The distinguishing feature of the computer compared with most of the technological developments dating from the beginning of the industrial revolution is that it gives mental or intellectual advantage to man rather than mechanical advantage.

To some physicians a computer is a symbol of inhumanity, a blinking, rigid monster devoted to dehumanization with dangerous machine rigidities. To others the computer, the bloodless technician is the route to new pedagogical sophistications.

Computer technology has launched medicine on a bold adventure. The enormous data banks, the logic power of the computer—millions of times faster than man's own logic and free from errors—are truly awesome in their potential. With the logic power of the computer and mass-information retrieval available to it, physician researchers will be able to formulate more hypotheses and immediately test them on pertinent data.

Symbiosis is defined as the living together in more or less intimate association of two dissimilar organisms. In the future medical world, the computer with its associated equipment will be one organism and the physician by means of appropriate terminal will be in symbiosis with the computer. There will be a symbiotic age when the limited brain of man is supplemented by the vast data banks and logic power of distant computers.

Will physicians and medical institutions become so mesmerized by the wonders of computer technology with its reliance on precision and quantification that the mobility of our broader intellectual and artistic accomplishments is denigrated?

Will physicians anticipate that symbiosis with computers will mean new attitudes, new ethics, new laws and many forms of social actions or will we permit the exploding medical computer technology to race ahead undirected leaving us to sort out the mess afterwards?

Is it quibbling when some physicians accuse the computers of mishandling personal information or effecting a lessening of privacy? Will physicians keep the privacy issue uppermost in their minds in their symbiosis with computers?

The "Frankenstein Complex" seems to be as integral to man's nature as the Oedipus Complex, for humanity has certainly devoted enough verbiage to the horrors of his creations getting the upper hand. Just as the Oedipus Complex is outgrown by the healthy individual so the Frankenstein Complex should be outgrown by the healthy society. The key to this maturity is the knowledge that the computer is just a tool. Unless man uses the computer with wisdom and self-control, the computer could be a tool for standardization and suppression rather than individualization.

We should begin to carefully construct plans for medicine in which computers help humankind realize its potential rather than a computer society in which deterioration results. We must remember that computers create unforgetting and unforgiving record systems and that possession of information by computers is also the possession of power.

The problem of symbiosis of physicians and computers lies not in the computers themselves, but in man's self-awareness, wisdom, self-discipline and maturity in using computers.

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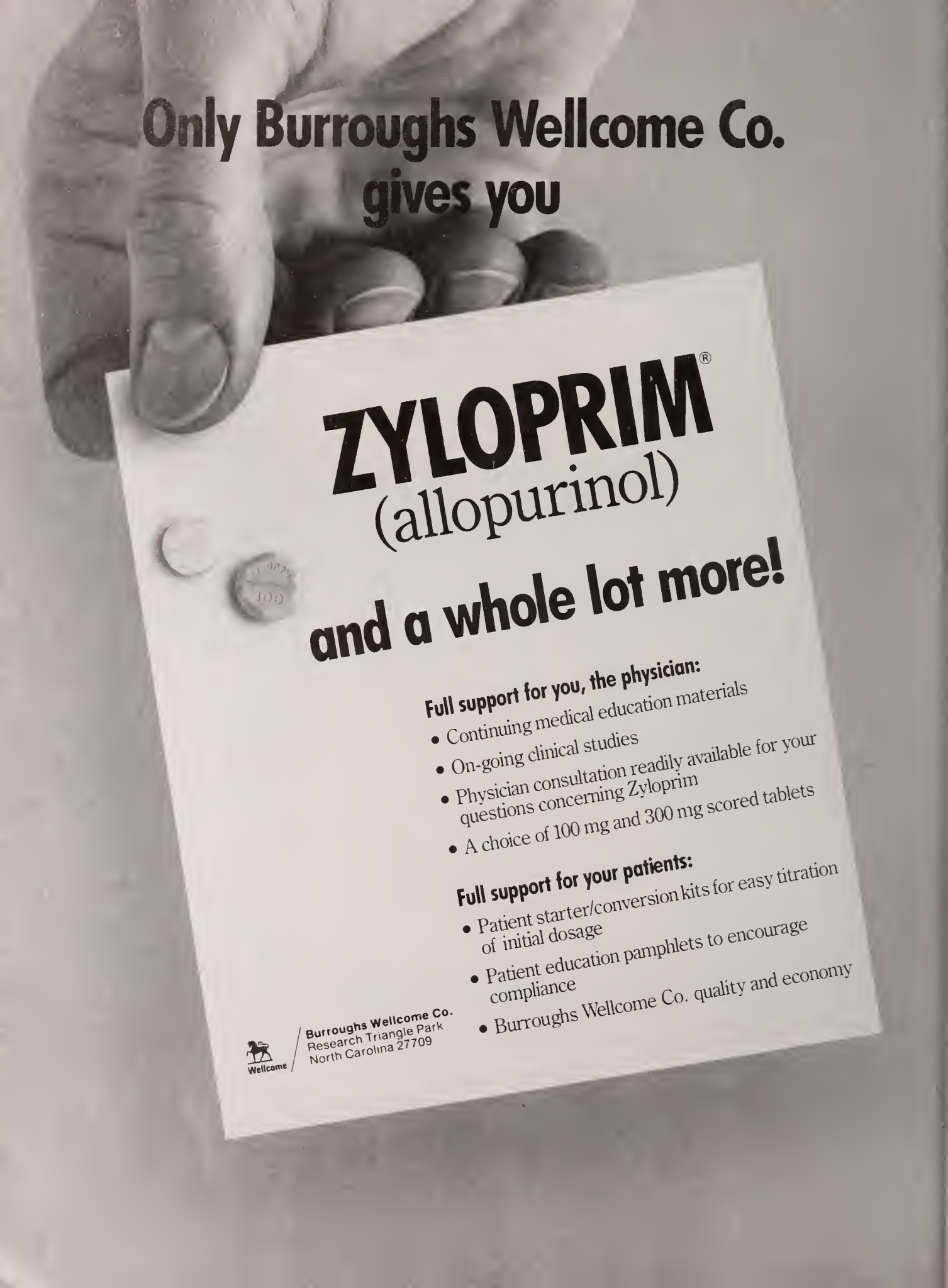
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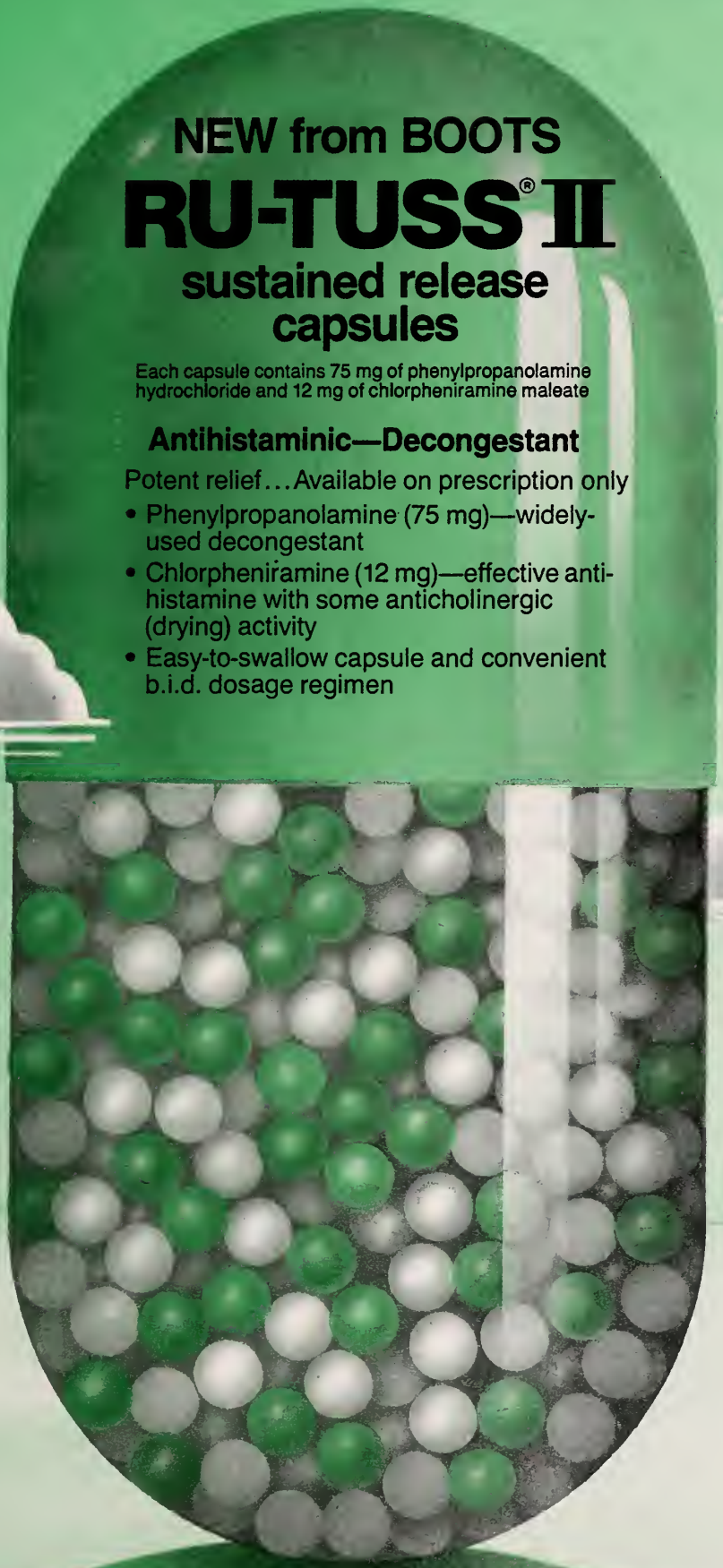
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Computers in medicine

Lamar Crevasse, M.D. and Mario Ariet, Ph.D.

If anybody doubts that we are in the midst of a computer revolution, he or she should consider the following facts:

a) The computer was named "man of the year" by *Time Magazine* in 1982.
b) In 1982, IBM derived more revenue from the sales of their small computer systems than from the sales of large systems.
c) The sales of personal computers and accessories in the U.S. amounted to $2.2 billion in 1981, $4.8 billion in 1982 and will be $8.0 billion in 1983 and the curve continues to grow exponentially.

The computer has emerged as the technological marvel of the 80's to cope with our emerging mass-information/high-technology society.

The first computer weighed 30 tons, contained 18,000 vacuum tubes and failed every seven minutes. The advent of transistors and micro-circuitry made it possible to reduce these room-sized computers to microchips measuring a few square millimeters. The cost of a computer has dropped from hundreds of thousands of dollars to a few thousand dollars for a microcomputer which can perform complex mathematical computations in a fraction of a second. It can store, sort through, and rapidly retrieve immense quantities of information. This function is vital in the field of medicine where the information explosion has inundated the profession with ever-changing data and increasing requirements for detailed record keeping.

The use of the computer in medicine began by performing billing functions in hospitals. Processing electrocardiograms was one of the first successful clinical applications. Its use in automated analysis of laboratory tests is well established. The advent of CAT scanning and image processing has revolutionized diagnostic radiology.

The access to large data base systems such as AMANet and Medlars by the personal computer opens vast information sources to the physician. The microcomputer now controls implanted pacemakers and carefully pumps measured quantities of insulin for diabetes patients.

The phenomenal power of the microcomputer and its decreasing price is dictating its utilization in ever increasing areas of application. This trend will be continued for the foreseeable future. Physicians who encounter these machines in their children's video games, in their automobile and in their banking are also interacting more and more with them in their professional endeavors.

In this special issue we have tried to select articles to acquaint the physician with the computer and with some of its major areas of application in medicine. Space limitations have prevented us from including articles on important areas such as the role of computers in medical undergraduate and graduate education, computer-assisted instruction and in the monitoring of severely ill patients in intensive care units. The first article presents an overview of how computers work. It describes the functional capabilities of the components of a computer system and suggests general guidelines for the acquisition of computer systems. The second article describes the major areas in which computers can facilitate and improve the functioning of physicians offices.

The third article describes the utilization of computers as the major communications device in modern hospitals. This application is denominated a Hospital Information System (HIS). Computers have evolved from the strictly financial patient billing function to one of scheduling of all patient activities, reporting of test results, monitoring of the medications, inventory of supplies and storage of patient medical records. The functions of a computer in a clinical laboratory are described in the next article. It lists potential benefits derived from the computerization of clinical labs and emphasizes its role as a key component of the HIS.

The applications described so far take advantage of the ability of the computer to acquire, store, retrieve and report information. But most of these can be considered automated clerical functions. On the other hand, the next article describes an application, still in a developmental phase where the computer attempts to perform the clinical function of diagnosis. It achieves this by acquiring the symptom and laboratory result data fed into it and processing it by applying a combination of logical decision making and statistical analysis techniques based on the compatibility and the frequency of symptoms and test results with each disease type.

The last article exemplifies the specialized use of computers within medical instruments. The application of modern technology, particularly in noninvasive views of dynamic living organs, will undoubtedly provide major advances in the diagnosis and treatment of disease.

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Gainesville

Mario Ariet, Ph.D., Coeditor
Gainesville

Computer systems: an overview

Ralph W. Swain, Ph.D. and John K. Cuddeback, M.D., Ph.D.

During the past three decades, the use of computers has enabled man to achieve many goals once considered impossible. Although the basic conceptual structure of the digital computer has changed little since the early 1940's, sweeping technological advances, occurring at a rate unprecedented in human history, have transformed computing from a remote and mysterious thing into a commonplace — indeed, essential — component of every modern industrial society. The most important practical effect of this astounding progress, both in the design of computer hardware and in manufacturing techniques, is a much wider availability of computing equipment, resulting mainly from the lower cost of processing power. A microcomputer system which costs less than $2,000 today may well have more computing capability than an advanced commerical system of 20 years ago.

But computer hardware, by itself, is of very little practical benefit. Of equal importance is the software — the programs of instructions that direct the hardware to perform a particular sequence of data processing operations to yield a meaningful result. The progress which has occurred in the design of computer software, albeit less dramatic than that in hardware, makes the power of the machine more immediately accessible to a far wider community of "users." Because of much more sophisticated software, today's computers can be utilized with far less training than comparable systems of two decades ago.

For those who have observed this technological revolution from a distance, the sight is at once amazing and a bit (no pun intended) terrifying. How can one keep up with the changes? What is a byte? How does ROM differ from RAM? Is the difference

The Authors
RALPH W. SWAIN, PH.D.
JOHN K. CUDDEBACK, M.D., PH.D.

important? What determines the choice among all the different communications protocols? Why does a hard disk hold more data than a floppy? As if the technology were not bewildering enough, it is usually described in a quaint jargon whose charm is apt to elude the bewildered. The casual observer risks being overwhelmed by all this technology, which may make it difficult to visualize how computing might be of real value in one's professional or personal endeavors. How far can technology preceed our understanding before we become its servant, rather than the other way around?

It would clearly be futile to attempt, in a single paper, a thorough explanation of computing principles, the design of effective data processing applications, and a systematic approach to acquiring computing capability. We believe, however, that it is possible to provide a general understanding of each of these important areas and to refer the interested reader to more detailed coverage of these subjects. We hope to suggest that today's computing resources are not out of reach, and that they can, with careful planning, be put to a variety of good uses in the delivery of medical care.

Computer system architecture • Although they span a wide range of price and capability, most computer systems share the same basic architecture. As shown in Figure 1, there are three basic hardware components of a computer system:

- The central processing unit (CPU) and associated peripheral processors
- Memory, including main memory and mass storage devices
- Input/output (I/O) devices.

Every functional system must include at least one item from each of these categories. In systems designed for specific applications, one particular subsystem may be emphasized, while other subsystems are present in only a minimal configuration. Personal computer systems, mainframe computers that support sophisticated hospital information systems, and the small computers that run digital watches all have each of these three subsystems, but they also illustrate the wide range of capacity and capability within each category.

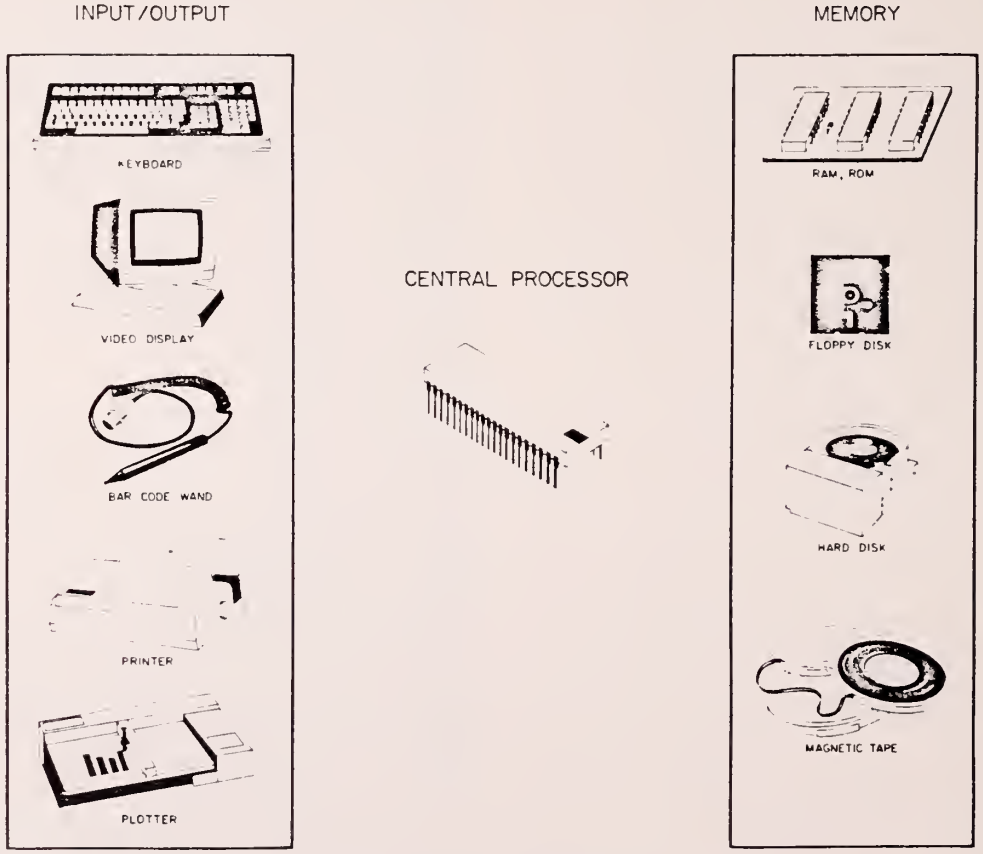


FIGURE 1 COMPUTER SYSTEM HARDWARE COMPONENTS

It is, of course, the CPU that actually "processes data," but to accomplish any useful work, the processor must have access to memory, in which to store its program of instructions and the data upon which it executes these instructions, as well as to input/output devices, through which programs and data may be transmitted to the machine and the results of the processing operations may be transmitted to the user. Some specialized microprocessors include a limited amount of memory and certain I/O connections on the same chip, but most general-purpose computers require memory and I/O device controllers external to the chip(s) which comprise the main processor. Usually the processor is located on a circuit board that plugs into a "bus," which facilitates high-speed communication between the processor and main memory and between memory and I/O device controllers. The latter components are typically located on their own circuit boards, which are also plugged into the bus.

The processor's instruction set and the bus protocol, which specifies the rules by which the processor communicates with other subsystems, defines the "architecture" of a computer system. System architecture varies among different computers, according to the primary task for which the machine is designed. Computers intended for the "transaction processing" environment — automated bank teller machines and modern hospital information in the "batch" mode, in which each user's job was prepared off-line, usually punched onto cards, and the entire job sequence was submitted, as a whole, to the computer, whereupon the operating system would schedule its execution, again considering the entire job as a whole. Only when the user later picked up his printed output did he discover the results of his efforts. Modern computers, ranging from large systems with "time-sharing" operating systems to small, single-user microcomputers, commonly deal with their users "interactively:" the computer responds to the user as he enters individual commands and during the execution of his job, providing an opportunity for the user to base the later steps of the processing sequence on the results of earlier steps. Even in high-volume "production" data processing jobs, such as hospital billing systems, which are still conventionally run in batch mode, for greater machine efficiency, users are often permitted limited on-line access, at least to look up records from the production system files, if not to modify them, as well as to monitor the execution status of the batch job.

The hardware and software technologies which have brought about this fundamental change in the way the user deals with the system are crucial to many important clinical computer applications, such as on-line hospital information systems. Only if it responds to the user's commands and queries while he is still interacting with the terminal can the system play a meaningful role in the communication process that is at the heart of modern, "team-oriented" medical care.

Central processor • The active element of any computer system is the CPU. In the earliest computers, this subsystem was comprised of thousands of vacuum tubes. Now, much greater capability is available in single-chip processors, which are called microprocessors, due to their small size. Some microprocessors have been designed to perform a specific task, such as monitoring automobile engine exhaust gases and dynamically adjusting engine operating parameters to comply with air quality regulations. Others are of a much more general nature, intended to run a wide variety of programs. Such processors are the basis of general-purpose "personal" computers and are also used in sophisticated control systems for industrial process control. Microprocessors were introduced in 1971 and have evolved rapidly in complexity and capability. The "power" of a specific processor is determined by three factors:

- The maximum size of the data elements it can manipulate in a single operation (instruction)
- The variety of instructions the processor can perform (its "instruction set")
- The speed at which it can execute these instructions.

The latter criterion is actually of far less importance than it might seen, since the speed with which a particular computer system accomplishes a specific application results from a number of factors, many of which are more important than the intrinsic speed of the processor. Likely to have more impact on the overall speed of an application task are the efficiency of the operating system and the programming language — the amount of processor power they devote to "overhead" tasks and whether their executable code fully exploits the processor's instruction set.

Although rapid technological advances are blurring these traditional distinctions, three classes of computer systems are generally recognized, based chiefly on the power of the CPU which is at the heart of the systems.

- Mainframe systems, which typically cost $1 million or more, usually employed in large commercial or time-sharing data processing environments, serving hundreds of users at once; health care applications include hospital financial systems and comprehensive, on-line hospital information systems.

- Minicomputer systems, which typically cost from $20,000 to $300,000, usually used for specialized applications such as data collection and process control systems in manufacturing and scientific research, or multi-user "office automation" systems; health care applications include image reconstruction in CT scanners and typical clinical laboratory systems.
- Microcomputer systems, which typically cost from $1,000 to $10,000, and usually perform a single function or serve a single user at a time, the most popular applications being word processing programs (e.g., WordStar), "spreadsheet" programs (e.g., VisiCalc, Lotus 1-2-3), and serving as "intelligent terminals" to large computer systems.

As we discuss the central processor subsystem, we shall attempt to further illustrate these commonly used, if somewhat artificial, distinctions, recognizing that there is now essentially a continuum of processor capability and that many of today's systems defy classification by this simplistic scheme. The practical distinctions between these classes of systems also depend heavily on other criteria than CPU power, such as the sophistication of the operating system and the number of additional specialized hardware components that are included in the system architecture.

In order to appreciate the practical importance of the size of data elements a CPU can manipulate, one must first know something about how a computer stores its information. Data in a computer are represented in "binary" form, i.e., using only the symbols of the binary number system, 1 and 0. The computer's memory is comprised of a vast number of individual cells, each of which is capable of two discrete states, taken to represent 1 and 0. Each cell is called a "bit" (for Binary Digit). Although there are only two symbols in the binary number system, more complex kinds of information can be represented by strings of binary digits. With three bits, for example, one can represent eight discrete states: 000, 001, 010, 011, 100, 101, 110, 111. While it would be possible to refer to each cell of a computer's memory individually, it is usually most convenient to think of groups of eight consecutive memory cells. Each group of eight bits, called a "byte," can represent 256 discrete states.

Let us consider for a moment representing conventional (base 10) numbers in the binary system and performing arithmetic operations on them. Since it can represent 256 discrete states, one byte can represent either the integers 0 through 255, or, if negative numbers are considered, -128 through 127. Exactly which number each possible "bit pattern" is taken to represent depends on the hardware design of the processor. While 256 discrete states are not enough to count many things of obvious interest — the number of patient records in a typical office practice, for example — several consecutive bytes may be considered together to represent much larger numbers. In two bytes (16 bits), one can represent 65,536 discrete states, which would probably be enough to count the patients of most office practices. In four bytes (32 bits), one can represent nearly 4.3 billion discrete states, almost enough to count the world's population.

Although we seldom deal with integers that large, it is usually necessary to have at least that many discrete states to represent numbers with fractional parts to the degree of precision required for most scientific computations. Again, the numerical meaning of a specific bit pattern depends on the design of the processor, but most computers represent non-integer, or "floating-point," numbers in a format derived from scientific notation — several bits are used to represent an exponent, denoting the order of magnitude (power of 10 or power of 2), and the remaining bits represent the significant digits (mantissa).

While mainframe computers and large minicomputers have hardware to carry out both integer and floating-point arithmetic, most microprocessors have native instructions only for integer arithmetic. Incorporated within the BASIC language processor of a typical personal computer are subprograms which utilize the processor's native integer arithmetic instructions to perform floating-point arithmetic. While they go get the right answer, such routines involve a great deal of manipulation, and consequently such processors perform scientific computation significantly less rapidly than larger machines that have "hard-wired" floating-point instructions. Technology marches on, however, and a number of microprocessor chips with native floating-point instructions will soon become available for microcomputers, narrowing the edge held by mainframes and minicomputers in computation-intensive scientific processing. (There remains some intrinsic difference in instruction execution speed, however, as well as the advantage many large systems achieve by incorporating multiple processing units into their architecture.)

To store data in text form, it is clearly possible to devise coding schemes to represent in one byte up to 256 different characters, which is sufficient to represent all the upper and lower case characters, all the arabic numerals, and quite a variety of punctuation marks, as well as an assortment of "control" characters, such as one which might instruct a printing device to skip to the top of a new page. It is the popularity of eight-bit schemes for coding characters — together with the predominance of character manipulation over arithmetic computation in

modern commercial and personal computing, including most systems devoted to supporting health care delivery — that has made the byte the most common unit of reference for computer memory. Figure 2 summarizes these concepts for using the binary number system to represent integers, floating point numbers, and characters. It also includes examples of two popular coding schemes for representing characters in eight-bit bytes, known as ASCII and EBCDIC.

The earliest microprocessors could manipulate only four bits simultaneously and thus required two operations to handle even one character. Such machines were employed primarily in special applications, such as the early hand calculators. The first microprocessors to be used in general-purpose personal computers could process one byte at a time. The Apple II and the TRS-80 Models III and IV are based on such eight-bit processors. These microprocessors have more limited instruction sets than minicomputers (we have already pointed out their lack of native instructions for floating-point arithmetic), they must execute more instructions to carry out a given operation on a large volume of data (since they can access only one byte at a time), and they typically have relatively unsophisticated operating systems and programming language processors. As a result, their net speed is significantly slower than that of minicomputers.

Many of the more recent microprocessors and the majority of minicomputers, such as the PDP-11 series manufactured by Digital Equipment Corporation (DEC), are 16-bit devices. This increases the amount of data that can be handled in a single operation, both in terms of the size of the data element that can be manipulated and the complexity of the machine instructions that can be executed. The minicomputer is distinguished from the microcomputer also by the sophistication of its operating system, which permits it to serve multiple users simultaneously. This capability is usually supported by significantly greater power in the two other major subsystems — memory (including mass storage devices, as well as internal memory) and I/O devices — than is found in the typical microcomputer. Larger minicomputers include separate hardware processors to handle communications with the users.

Some microprocessors, such as the Intel 8088, which is the heart of the IBM Personal Computer, can handle 16 bits internally but have the capacity to access only eight bits at a time. This provides a device with intermediate power, particularly in applications such as word processing, which entail performing relatively simple operations on large volumes of data. The 16-bit microprocessor market is advancing rapidly, however, and new systems based on these devices are being announced weekly. Some recent improvements in 16-bit microprocessors suggest that these will be very powerful devices and that systems based on them will enjoy a relatively long life — long, at least, in terms of computer technology.

Extremely popular in today's market is the 32-bit "super-mini," typified by DEC's VAX 11/7XX machines, the Data General MV family, and IBM's 43XX series. These machines offer an architecture whose sophistication rivals the mainframes of only a decade ago, as well as access to advanced operating systems and other software tools formerly available only in mainframe machines. Although they provide significantly less "throughput" than today's even more powerful mainframes, they are also significantly less expensive, and they effectively bridge the gap between large minicomputers and the smaller mainframes.

Mainframe computers, such as IBM's 30XX series, are distinguished primarily by size, speed, and complexity of architecture. They achieve significantly greater "throughput" by delegating almost every task other than the core data processing functions to specialized subsystems which are themselves powerful computers. These subsystems con-

Binary Representation of Data

Integer Representation:

Decimal Representation	Binary Representation	
3	00000011	
-9	10001001	Bit 7 is a sign bit
300	00000001 00101100	Requires 2 bytes

Floating Point Representation:

Note: Floating point representation is hardware and software specific.

Decimal Representation	Binary Representation			
-5.25	11000001	01010100	00000000	00000000
	a b		c	

Note: To convert this, the following information must be used:

a. The sign of the number is the first bit (1 implies -)
b. The next seven bits give the characteristic in powers of 16 in excess -64 notation: 10000001 = 65 decimal, and subtracting 64 indicates that the fraction is multiplied by 16 to the first power.
c. The remaining 3 bytes give the fraction in standard binary notation. The leftmost term is ½, the next ¼, etc. Using this interpretation, the fraction is (¼ + 1/16 + 1/64)

The overall result is: (-1) x (16) x (21/64) = -2¼ = -5.25

Character Representation:

Character	ASCII	EBCDIC
A	01000001	11000001
a	01100001	10000001
3	00110011	11110011
+	00101011	01001110

Fig. 2. — Binary Representations for Data

trol the flow of data between the main processor and peripheral devices such as disk drives and line printers, and they support complex telecommunications networks which connect the users to the machine. In smaller systems, many of these tasks are handled by the main processor itself. Many mainframes have internal memory larger than the typical microcomputer hard disk, equipped with hardware to support sophisticated addressing schemes which enhance the efficiency of the operating system. The instruction set typically includes a vast repertoire of 16-, 32-, and 64-bit instructions.

Before we leave the topic of CPU hardware, it is appropriate to comment on one more major difference between early computers and those commonly available today — the astounding advances in reliability. We do not mean to suggest (even remotely) that systems can now be safely designed without high regard for backup and recovery procedures, but this greater reliability has important practical benefits in making computers more widely available. Many current microprocessor applications would be infeasible, owing to service costs alone, without hardware that is much less sensitive to power line fluctuations and environmental influences than the machines of just a decade ago.

Memory and mass storage devices • Memory in which to store programs and data is obviously essential to every computer system, but the wide variety of system requirements for speed of data access and economy of long-term data retention have led to the development of a number of different kinds of memory devices. Some memory must be immediately accessible to the processor, capable of storing or retrieving a byte of data very rapidly (usually in less than a microsecond) upon instruction by the processor. Such "main" memory is commonly referred to as RAM (for random access memory), due to the fact that any address in RAM can be selected directly by the processor for either storage (writing) or retrieval (reading). In current technology 65,536 bits, or 8,192 bytes, can be stored on a single chip. One further shorthand, beyond bytes, to count memory cells — 1,024 elements are called a "K." Thus, this chip contains 64K bits or 8K bytes. Before modern solid-state chip technology was developed, RAM consisted of an array of tiny, doughnut-shaped magnetic "cores," suspended on a matrix of fine wires. For this reason, the processor's main memory is still sometimes referred to as core memory. Solid state RAM is matched in speed to most current processors and is far more compact and far less expensive than earlier memory technologies.

Despite its useful properties, RAM has two major shortcomings: it loses all data when power is turned off (for which reason it is called "volatile" memory), and it is not yet sufficiently cheap to make it practical to store in RAM all the data a user might ever want to keep, even if constant power could be supplied. Two classes of alternative memory devices have evolved, to deal with these problems: "mass storage" devices employing magnetic media, such as disks and tapes, and a non-volatile solid state memory called ROM (for read-only memory).

ROM can be directly addressed by the processor as part of its own main memory, but it differs from RAM in that memory contents are unaffected by power failures. They are also unaffected by the processor's attempts to store data into them. While this latter property obviously constrains its use, ROM is well suited to several important applications. ROM can be loaded by system manufacturers with programs to control start-up of the machine when power is turned on, as well as certain programs used to control the execution of user programs — from an entire operating system to special "interpreter" routines that translate BASIC program language instructions into machine instructions. In modern minicomputers, the front panel switches and lights have been almost entirely obviated by programs stored in ROM which permit the user to perform very easily from a terminal all the tedious functions which could be done only from the switches in earlier machines. The game cartridges for video game systems are, in fact, ROM in which the manufacturer has stored the programs that cause the microprocessor inside the video game unit to execute the particular game. Sophisticated hand calculators contain ROM in which is stored the routines that enable their processors to compute trigonometric functions.

In contrast to the terms hardware and software, programs stored in ROM are often referred to as "firmware." For completeness, we define two further acronyms: PROMs (for programmable ROM) are ROM chips that can be loaded with programs or data at some time after manufacturing, rather than only during the manufacturing process, although this requires a special machine not normally available to users. EPROMs (for erasable PROMs) are PROMs that can be erased by ultraviolet irradiation and then reprogrammed.

"Bubble memory" is a non-volatile RAM technology that has recently become available but is not yet cheap enough for wide application. Although it will not likely replace ROM for storing system code which should not be altered by the user (such a microcomputer's BASIC program language interpreter), non-volatile solid state RAM would be preferable to small mechanical mass-storage devices, such as floppy disks, for many applications, including portable computers.

"Mass storage" devices include a variety of hardwre designed for economical long-term retention of large quantities of data. Most are based on recording the data on a magnetic medium — magnetic tape, flexible magnetic disks, or hard disks. In return for their desirable properties, such devices sacrafice three key properties of RAM: speed of access, reliability, and direct addressability. Storage or retreival of a specific byte stored on magnetic media is typically at least 1,000 to 10,000 times slower than accessing semiconductor RAM. This is partly because the area of the medium where the byte is stored must be moved under the recording head, a necessarily mechanical process, inherently slower and less reliable than solid state electronic components. Since the processor can read directly only those data and instructions which are stored in its main memory, accessing data stored on magnetic media typically entails considerable overhead. The procesor must use the operating system to locate the desired data in a "directory" which describes the physical layout of various data files on the magnetic medium, then request that the operating system read a "block" of data from the device into main memory. Only then is the byte available for use by the processor. Despite all of these limitations, storage of data on magnetic media is currently the most common form of permanent storage of computer-readable information.

The primary factors that determine the choice among the various forms of magnetic media are relative cost of the device and the medium and relative ease of access to data. On large systems, for example, magnetic tape drives are relatively expensive devices, but the cost of the medium itself is extremely low, making tape an attractive choice for storing large volumes of information, if the application is such that processing can be done in an "orderly" fashion. This latter condition derives from the property that data stored on tape must be accessed sequentially: to reach a record stored at the end of the tape, the entire medium — up to 2,400 feet in length — must pass over the head. While this is suitable for certain batch processing applications (e.g., typical billing or accounting systems), it is seldom useful in an interactive environment, where any user might request any record at any time.

Interactive systems must have their active files stored on devices such as disk drives, which support "random access" to the data. In contrast to the linear recording pattern of magnetic tape, data on disks are recorded in concentric circles. By combining the rotation of the disk with the radial motion of the heads, the heads can move directly to any record stored on the disk. "Hard" disk drives — often incorporating several platters stacked above one another with read/write heads that travel between them — are used for disk storage on mainframe and minicomputer systems. Data capacity per drive ranges from 5 MB (megabytes, or million bytes) to more than 1,200 MB. In the relatively new "Winchester" disk technology, the entire unit is sealed against airborne environmental contaminants, to permit the heads to travel extremely close to the surface of the hard disk, which facilitates very high recording density and very fast data transfer. Many microcomputer systems use small Winchester drives to achieve large storage capacities and fast access at reasonable cost, but since these units are sealed, the medium is non-removable. Consequently, such systems usually include some other device to allow transfer programs and data in machine-readable form. This device is usually a "floppy" disk drive, so called because of the flexible nature of the medium.

Floppies have relatively slow access times and low storage densities; 0.36 MB is typical of current technology for a 5¼" diskette. Current 8" floppy drives can store up to 1.2 MB on each diskette. Floppy disk drives can be produced cheaply and are reasonably durable. Floppy disks provide a compact and convenient format for interchanging data or programs between microcomputers.

Input/output systems • No computer system is of any practical value unless information can be transferred from the outside world into the computer and then back from the computer to its user. Input/output devices designed to fill this role come in almost unimagineable variety. The most common input device is the keyboard; the most common output device is probably the cathode ray tube (CRT), including both specialized terminals on professional systems and televisions used as monitors for home computing equipment. Printers are another common output device. "Hard copy" output is essential for information that is to be used at a time or place where a CRT is unavailable and for incorporating computer output into paper-based filing systems, such as medical records. It is also extremely convenient for data of a quantity greater than that which can be displayed on one screen of a CRT, such as a program listing.

Printers in common use include the "dot matrix" which is the printers in personal and small professional systems while the "daisy wheel," a letter-quality printer is used in many word processing systems, and the "line printers" are used in large computer systems. Dot matrix printers range in speed from 80 to 240 characters/second, daisy wheel printers from 30 to 60 characters/second. Typical impact-style line printers vary from 300 to 1,200 lines/minute, while "laser" printers, in which the image is scanned onto the drum of a high-speed copy machine, exceed 3,000 lines per minute. Laser printer technology permits the incorporation of graphics in

the output, as well as composition of "forms," upon which the printed output is superimposed. These flexible devices eliminate the need for large inventories of preprinted forms and facilitate production of attractive output, perhaps including a company logo or a signature, from blank paper in a single step, but their cost is still prohibitive for all but high-volume users. The choice among printers depends on speed, print quality, and repertoire of printable characters required. As might be expected, the cost of printers rises quickly with printing speed and character quality.

Presently, these three I/O devices — keyboards, CRT screens, and printers — represent probably 90% of all I/O activity, but there are a number of other devices which are serving a growing fraction of I/O requirements. Bar code readers, such as those used in many supermarkets, represent an effective means of reading data without keying it. Bar code is used heavily for inventory functions in industry and increasingly in blood banks as a reliable means of transferring information with a minimum of user effort, without the chance for errors and digit transpositions that manual keying entails. Another common code reader is the optical character recognition (OCR) device, such as those used in many department stores. OCR has the advantage of being able to scan characters which are also readable by eye, but it has not demonstrated the same high reliability achieved by bar code systems. Voice recognition represents a limited but growing means of input for certain special situations. Voice recognition equipment usually has a small vocabulary and must be associated with one or two users, but in applications such as sorting of packages in an overnight delivery center, it represents an effective means of interaction with the computer.

Accuracy is, of course, a prime concern in the design of computer input systems. Since human beings are not very well suited to accurate transfer of long strings of digits that have no intrinsic meaning, a number of special validity checking systems have been devised. The most common of these is the "check digit," an extra digit appended to a number which must be frequently keyed, such as a Social Security Number, which might be used as hospital medical record number. While it is impossible to embody in a single extra digit a unique validator for a nine-digit number, the check digit is derived from the sequence of digits in the Social Security Number in such a way that common keying errors, such as digit transpositions, would give a different value for the check digit. The computer input routine recalculates the check digit from the first nine digits entered and compares it to the tenth digit. A mismatch indicates a keying error; a match indicates at least that it is improbable that a keying error occurred.

Computer peripheral manufacturers offer an impressive range of output devices, including multi-pen X-Y plotters driven by commands from the computer and high-resolution dot-matrix graphics devices, such as the laser printer/plotter discussed above. These devices facilitate the production of visual displays, which can portray certain kinds of information, particularly relationships among data elements and relationships of data to fixed limits, much more vividly, more intuitively, then tabular presentations of the same data, as illustrated in Fig. 3. Speech synthesis represents another form of output which can make new applications possible. For example, banks can now have a speech output module attached to an automated telephone system, to allow customers to inquire about the status of their accounts. Speech output also allows interaction with the computer without the necessity to read printed output from the screen or paper. Combinations of character recognition technology and speech synthesis capability have already proven effective in providing new opportunities for the vision impaired.

A final I/O method that will undoubtedly grow in importance is communication with another computer. The most common applications are using microcomputers to access large public data bases via telephone and sending programs and data back and forth between computers. If both computers are located close together and use the same communications protocol, they may be connected without additional hardware. If the distance separating the computers increases, or if the communication link includes public telephone lines, additional equipment must be interposed between each computer and the telephone line. The most common such device is a "modem" (for MOdulator/DEModulator). Modulation is the process of converting the digital signal output from a computer (a sequence of 1 and 0 bits) into an audio signal in which the bits are indicated by changes in the phasing or frequency of a high-pitched tone (known as the carrier) which is within the bandwidth of the telephone system. Demodulation is the reverse process of reconstructing the digital signal from the frequency- 9 or phase-modulated audio. The rate of data transfer between computers is measured in terms of the number of bits per second (baud) which can be transferred. For small computers connected to public data bases, rates of 300 to 1,200 baud are typical; between large systems, rates of 56 kilobaud or higher are common.

A specialized and sophisticated form of computer-to-computer communication is the local area network (LAN), used to interconnect a number of computers within a single facility, as illustrated in Figure 4. Such a network might provide for connection of a number of small computers and word processors to a central machine that manages their common data base. This assures data consistency,

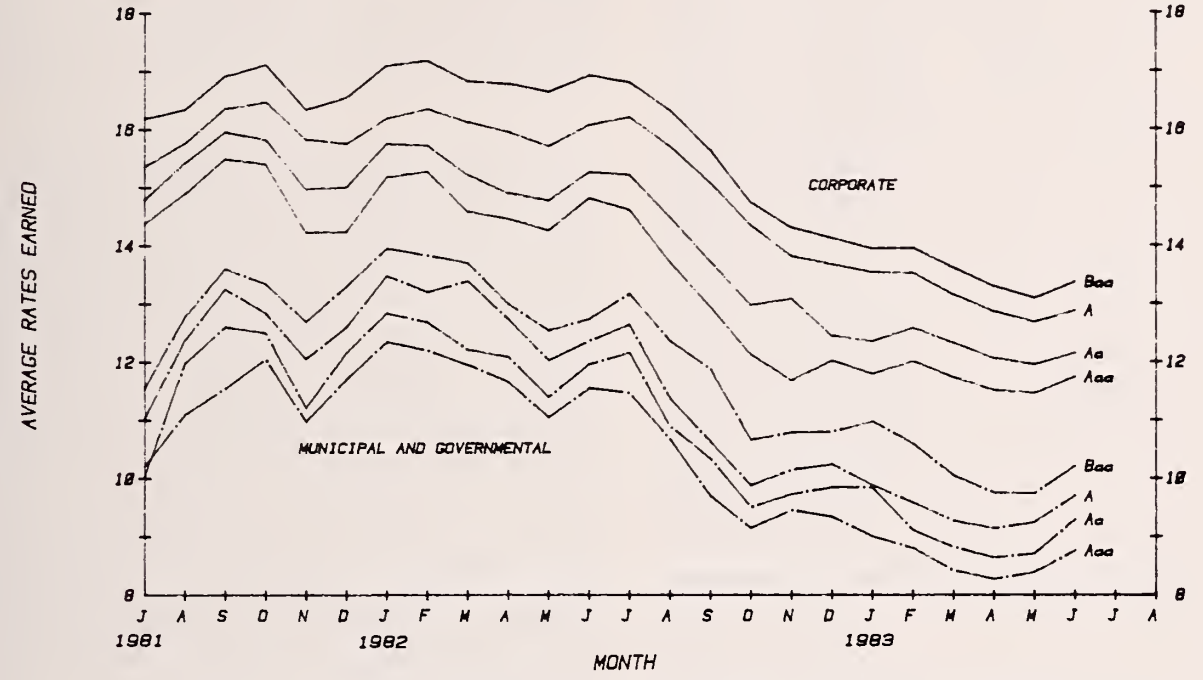


Fig. 3. — Graphical presentation of data produced by a microcomputer.

facilitates data security measures, and eliminates the costs associated with duplication of mass storage devices within each unit. In a less structured configuration, several microcomputers may be connected so that each user has access to the others' resources (printers or data files, for example, the latter with due regard for data security). These accesses can be "transparent" to the owner of the resources, i.e., they can be managed entirely by the network software, without requiring any effort on the part of a user of the owner's system. This kind of communication is rather specialized and is generally possible only among computers whose system software is designed for this application. Such systems typically do not require modems, but an adapter which can process messages from other nodes of the network must be present on each computer attached to the network. This configuration permits a single line to have a large number of devices directly attached to it, intercommunicating in varying patterns. There is no doubt that local area networks will be a key link in establishing the much-touted "office of the future."

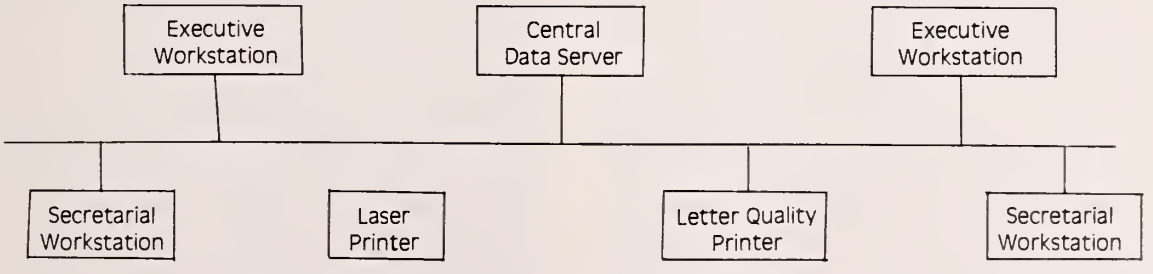


Fig. 4. — Interconnection of a number of computers within a single facility.

A systematic approach to acquiring computer systems • Few people can learn much about the current accessibility of computing equipment and the wealth of potential applications without considering the possibility of utilizing a computer in their own personal or professional endeavors. The rapid growth in the number and quality of retail marketers of personal and small business computing equipment make it easy to convert this interest into action with very little effort, if the resources are available. Unfortunately, simply obtaining a computer will be of little benefit unless it is preceded by careful analysis and planning. Very few of the computers purchased in a casual manner are utilized to the degree anticipated. While it may be possible to write some BASIC programs that will be very useful in producing statistics or performing other special tasks, it is unreasonable to expect that a complete system which is used as part of business on a daily basis can be written in this manner. For individuals who cannot devote their full time to systems design and computer programming, purchase of commercially available packages represents the most reliable approach. Systems which fulfill their purchasers' expectations are almost invariably obtained after careful study and planning.

Computers can be part of the solution to a problem or part of a strategy to improve efficiency, but they are rarely solutions by themselves. In the remaining paragraphs, we will attempt to outline those factors which must be considered before an effective investment in hardware and software can be made. With few exceptions, these factors are the same, whether the appropriate system is a $2,000 personal computer or a $2 million mainframe system. Careful consideration of exactly what the computer system is intended to do and thoughtful study of how the computer system will be integrated into the overall user environment are the key factors in determining the ultimate effectiveness of a computer acquisition.

An understanding of the system's functional goal and the environment in which it will operate must be achieved before one can seriously consider which piece of hardware to buy or in what language the application should be programmed. Consider, for example, setting up a system to simplify some of the tasks of managing a private medical practice. Functions might include maintaining an index of all active and inactive patients associated with the practice, providing a computer-accesible summary of current medical problems and treatments for each patient, keeping track of pending diagnostic procedures and recording follow-up actions, maintaining a computer-based patient scheduling function, maintaining a record of patient charges, preparing patient bills, and tracking accounts receivable.

While identifying these global functions represents a good beginning, it is only that. Each function must be explicitly defined in terms of the detailed subtasks which comprise it, the source of the data necessary to carry out each step, the schedule on which each task must be performed, and the personnel who will perform it. Defining the data requirements for each task will suggest mass storage requirements.

To continue with our example, the Master Patient Index function might include the ability to identify the patient by patient ID number (perhaps Social Security Number plus a check digit), by exact name spelling, by the first few characters of the last name, or by some phonetic coding scheme intended to permit retrieval of names even when the exact spelling is uncertain. In addition, the same global function could include subfunctions to create a new patient record, to edit information, such as address or phone number, contained in that record, or to delete a record from the active file (if a patient moves or has had no contact with the practice for some long period of time). It would probably also be desirable to have a function which could be used to reorganize the master patient file (for faster access and to conserve space on the mass storage device) once a sufficiently large number of patient records have been deleted.

Patient identity could be used to serve as the point of entry to many other system functions as well. Therefore, it is probably desirable to be able to pass the patient's identity (as coded in our hypothetical system) forward to each of the other functions. For example, we could go from identifying the patient to retrieving the current summary problem status list without having to reenter the patient's ID. This saves keystrokes and also reduces chances for error. Having entered into the Current Status function, we may wish to have the option of reviewing the current problem status, printing it for annotation (and subsequent updating by clerical personnel), or editing it directly, to reflect new problems identified or changes in the status of current problems.

Patient identity could also serve as the route to the Scheduling module of our hypothetical system. Functions of this module might include a means to enter the scheduling request (type of visit, desired interval until next visit, etc.), a method of searching the schedule data base and selecting an appointment date and time that satisfies the applicable constraints on the availability of special facilities and also fits with any of several practitioners' call and vacation schedules (which have been previously entered into the system), a method for recording the appointment, and a method for cancelling and rescheduling appointments. Other functions in this

same module might include the ability to search for all of a patient's appointments, a method for indicating parameters such as the duration of visits by type, the maximum percentage of available time to schedule (to allow for emergency patients), special preferences by half-day of the week, etc. It might also be desirable to gather information about patient no-show rates, to aid in future scheduling; perhaps the system should also print appointment reminder cards to be mailed to patients.

This description of a Patient Scheduling system represents a relatively sophisticated module, to be sure, but one should begin the system acquisition process with a clear statement of his ultimate goals, so that whatever trade-offs are eventually made can be made explicitly, weighing the cost of hardware and software to implement a desired function against a rational appraisal of the value to the practice of automating that function. The process we are describing here is really just systems analysis, and probably the most common serious pitfall in the analysis process is the strong human tendency to focus on the aspects of a problem for which we can visualize a concrete solution — whether it is a solution of one's own devising, one presented by a vendor's literature, or a system seen in another institution. Although it is quite natural to think in terms of hardware or system designs we happen to be familiar with, it is crucial that this not be allowed to channel one's thinking too narrowly during the problem definition phase. Otherwise, one may end up with a very tidy solution to the wrong problem! An honest approach to problem definition often motivates a search for hardware and software beyond one's current horizons, but in a field which is growing as rapidly as this one, such a search may quite possibly be fruitful.

Patient Accounting functions would be even more complex. In addition to a general patient identity, a specific set of identifiers will probably have to be associated with each patient account for billing purposes, so that cash applied from insurers can be applied against the correct instance of service. This module must have a mechanism for entering charges, crediting charges, receiving payments against charges, writing off the balance of partial payments, as desired or required, printing initial patient bills and monthly statements, providing on-line access to check the status of all of a patient's accounts, as well as routines to turn over accounts for collection, and routines for writing off uncollected bad debts. In addition to all of these direct functions, reporting on the status of accounts and the amount of the current receivable by payor may be useful in determining the particular collection action to be pursued. It might also be desirable to have a link between the Accounts Receivable system and the Patient Identification function, so that patients with unacceptable outstanding balances can be identified their next contact with the practice.

Despite the large number of subfunctions already considered, still other, more general, functions are required. For example, since no storage medium is immune to failures, there must be a practical, routine procedure for creating and storing backup copies of all the program and data files and a clearly documented procedure for recovery of the system from this backup data. If the Patient Accounting function is already being provided by an outside computing vendor, it will be desirable to have a set of programs which can convert the data from that system to the new internal system, to avoid having to reenter all outstanding accounts by hand. Careful reflection will suggest still more functional components that are required for system installation and routine system maintenance. One of the most important concerns at this point is to ensure that all the necessary functions are identified, even if their description is yet in rough form.

Still more information is required to fully specify the system requirements. This includes estimates of the number of patients associated with the practice, the number of annual visits, the average length of a patient status record, the average number of accounts receivable, and the average number of statements to be produced monthly. Few of these values can be stated with certainty, but estimates of them will be useful in determining the size of the system. This includes the relative power of the processor itself, the amount of main memory required, and the number and size of disk and tape storage devices required. Without concern for such factors at the outset, much effort might be spent selecting among systems that are either too small or too large to fit the needs of the practice.

All of that painful contemplation of functions and gathering of basic volume data will be of great value in selecting among potential vendor offerings. The initial functional descriptions both clarify the purpose of the system for the buyer and provide a natural framework for comparison of alternative systems on a common basis. Without a clear structure, it is difficult to make comparisons from vendor literature, which is designed to emphasize the best features of each vendor's system. Except in rare circumstances, no vendor will provide all of the functions enumerated, and often the marginal cost of obtaining a particular function will be too high to justify its purchase. If all of the systems can be compared from a common point of reference, it is much easier to draw rational conclusions about these trade-offs.

Often it is effective to narrow the range of vendors to one or two, in order to perform further, more

detailed evaluation. One should make every reasonable effort to see each system under serious conderation — in normal operation, in a comparable setting — before making any commitment. A fundamental law of computer system purchases: a system which is not yet built can do anything (or at least its vendor can claim that it will!). In talking with other users of the system, one should attempt to determine how satisfied they are with the performance and reliability of both the system and the vendor. What are the system's strengths and weaknesses? Would they choose the same system again? What was the worst part of installing the system? All of this is crucial information, but it can be gathered only with effort. Recognize that no system, no vendor, is perfect. Some compromise will likely be required. The process of responsible system choice consists in finding a system which — upon informed consideration — best matches the ultimate user's specific needs and will fit well into his particular environment.

After all this fuss to make the right decision, it would be nice to "lay low" and let the vendor do all of the work of installing the system, but this too, is risky. Introducing a computer into any workplace can be a traumatic experience, unless the users are prepared for it and confident that they are in control of what happens. Much of the potential trauma can be relieved by involving the users of the sytem in planning for its installation, but providing adequate training is probably the single most important factor in achieving a successful installation. Experience with the system in a non-threatening environment, without the stress of daily demands, provides an opportunity to make the inevitable mistakes and to learn that no damage is permanent if properly handled. Employees who are confident about their own capabilities with the system will be proud to display their newfound talents. In addition to training for the employees, consideration should be given to how the new system will fit into the daily routine. Where will terminals and other equipment be placed? How often will patient information be updated? Which members of the staff will be responsible for which functions? Who should have access to each part of the data base? Introduction of the new system will change the operation of the practice permanently,so how will the office continue to operate in the event of a computer hardware failure, which WILL eventually happen?

We hope it is clear from this discussion that selecting a system for professional use requires great care and much investigation, to avoid unfulfilled expectations. Computer systems can provide substantial benefits, but only if they are selected in an enlightened manner.

Looking ahead • Attempting to predict the future in computing technology is quite a dangerous venture, due to the rapid rate at which new products — indeed, whole new technologies — are being introduced. Several trends that are now in motion will, however, almost certainly continue for the remainder of the current decade. These include the increasing capability of microprocessors, both in terms of speed and complexity. By 1990, 32-bit processors will be in common use in small commercial systems. Another trend which will continue is the increasing density of RAM memory chips. We are close to the commercial introduction of 256K bit chips now, and 512K bit chips may be available by 1990. A similar increase in density and decrease in cost will probably occur in hard disk storage, although the limits of this technology are more difficult to establish.

In the areas of software and applications, greater development of operating systems is inevitable, particularly in microcomputers, in order to support the increased capabilities of hardware and the broader requirements of end user applications. Those applications will probably become easier for the novice user to operate successfully and will include much greater emphasis on graphics as a means of data presentation.

Many of the limitations to expanding the role of the computer still further stem from the limited knowledge many of us have about computing. As the general population becomes more aware of, and at ease with, computing systems, we can expect the phenomenal growth of computing applications in all facets of our daily lives to accelerate to an even faster pace.

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Physicians' office automation

Mario Ariet, Ph.D. and Lamar Crevasse, M.D.

The largest growth potential for the computer industry at the moment (except for home computers) seems to be the area of office automation. Physicians' office automation is a specialized field within office automation. A study of the activities of a physician and his/her supporting personnel in a group practice reveals many functions which would benefit significantly from computerization.

Billing • The billing function, particularly when the third party payor aspect is included, is the activity with the largest incentive for computerization. It is repetitive, requires many detailed entries, there are different forms which must be completed from different insurance companies, sometimes the patient is covered for some services by Medicare and for other services by another company, etc. Partial payments to bills, readjustments based on payments by the insurance company at a different rate than expected and many other complications occure everyday in a typical physician's office. Many commercially available programs attempt to solve or alleviate this problem. For the physician, the most important variable for selecting a package should be its *flexibility*; i.e., how easily can insurance forms be changed in format or how can bills be rearranged after a company decides that it will not honor a claim. Will the company that sold the package continue to support it and upgrade it? How much will it cost to accommodate specific needs of his/her office if some programming changes are required to implement them? Obviously, there is a compromise faced by program developers. If they program in all of this desirable flexibility, the original development effort would be quite large. They would hope to recover it by the easier implementation of subsequent changes. The other alternative is to first develop an inexpensive, inflexible program and make program changes as users request them.

For the physician user, the important realization is that changes will be required (we live in a dynamic world) and how these changes will be implemented must be clearly established before purchasing a package or signing a contract. It is unrealistic to think that any but a small minority of physician users (or other people in their staff) will make any changes to established program formats and procedures and even fewer will make any programming changes to a commercial package. An important aspect of billing packages is their ability to check for data entry errors which of course are most easily detected at the time they are being entered, but they can also be discovered later and it still must be possible to correct them easily.

Word processing • This function encompasses a series of automatic aids to facilitate the typing, storage and retrieval, and distribution of letters, reports, documents, etc. This is a well defined function which is so predictable, that many successful programs have been developed to automate it. Many

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companies have marketed devices that are preprogrammed to perform this function. A frequently used buzz word in the field is "ergonomically designed" which means that the hardware (the keyboard, the screen, the printers) and the software program themselves have been designed with great concern for the needs of the operator of the equipment. The screen has a certain color which is pleasing to the eyes and minimizes strain on the eyes after prolonged continuous use. The screen is adjusted to the correct angle so that the position of the back and neck is not strained when the operator looks at it. The keys on the keyboard are located in a position which are easily and logically reached by the operator, etc. These considerations suggest that competition among different vendors is intense and motivates each of them to develop enhancements to the basic product to attract new customers. Another example of sophistication is the addition of spelling checkers and hyphenators. These are programs that check input text versus a large dictionary stored in its memory and if a word cannot be found, different alternatives are offered to the operator. Based on the dictionary, hyphenation can be provided. Other manufacturers provide hyphenation based on an "algorithm" (an algorithm is a set of logical rules or steps) but English has enough grammatical exceptions that 100% correct hyphenation can only be guaranteed with a table look-up of all the words.

In a physician's office, some of the correspondence will be related to problems or clarifications in the billing function so it is essential that data from the billing system be easily retrieved and incorporated into a letter as it is being typed. This requires that the billing and word processing modules be "integrated" i.e. that they be able to communicate easily and that their storage formats be compatible. As we discuss other modules, we will continue to emphasize the need for their integration.

Medical records • The medical record is the most obvious candidate for computerization in medicine. It is basically a "file" which contains medical, sociodemographic and other data about the patient. It serves as a legal document but its most important function is as a repository of information which should be easily retrievable and should provide a chronological picture of the illnesses and medical problems of the patient.

In a hospital environment, this objective has been very difficult to achieve in spite of very significant expenditures of monies and manpower. The major difficulty lies in the lack of ability of computers in understanding English. Current machines and programs can store and retrieve English text as it was typed in, but they do not "understand" it. They can also retrieve selected portions of the text by searching for the occurrence of a particular word or words (the name of a disease, or the name of a physician) or a group of letters which must have an exact match in the text, but handling synomyms of finding "meaning" or alternative ways of expressing an idea is still a function in the realm of research in "artifical intelligence" (a field of research dedicated to simulate human behavior with computers). At the present time, the practical way to alleviate this problem is to increase the structure of the medical record. One example of such structure is Weed's Problem Oriented Medical Record. The other important strategy is to enter medical data by using "codes" instead of using "free text". The use of codes becomes very difficult in a hospital setting because the patients are usually treated by different specialists and most general codes are not specific enough to cover the level of detail required in each specialty. On the other hand in a physician's office, there tends to be less variability in the types of medical problems seen and the physicians in a group can modify existing codes to obtain from them a satisfactory level of detail.

The fact that in a physician's office, the patients are ambulatory and come in for a "visit" lends itself to a record with much more structure than the inpatient hospital record. For these reasons, satisfactory medical records systems can be implemented in microcomputers which can also be integrated into a word processing package. This combination makes it possible to write letters which can inform all patients having the same disease that a new drug or procedure has become available or that it is time to renew or provide a particular vaccination to one of their children.

The handling of the medical record information in the computer can be implemented using a type of special purpose program called "data base management" software. These programs consist of four primary modules. The *file definition* module defines the structure of the record. For instance, one would specify that the registration record contains a patient name, date of birth, sex, race, address, phone number, insurance company name, and policy number, etc., while the visit record would contain primary and secondary problems, procedures performed with their results, medications ordered with the dosage and regimens, etc.

The *data entry* module would then request this information in an orderly fashion, check the input for errors and store it.

The *inquire* or *query* module makes it possible to retrieve information on one patient or on a group of patients that meet some logical criteria such as all females between the ages of 30 and 40 who are taking birth control pills. These requests can be formulated in a structured language which nevertheless closely resembles an English sentence.

Finally, the *reporting* module provides tables with totals or averages for summarizing the results of the retrieval process. Again, headings and report organization can be specified without a knowledge of programming by responding to "prompts" or "menus" generated by the system.

The data base management software can also be used as a tool to implement the billing package.

A particular component of the medical record which deserves special attention is the *patient history* because it presents the possibility of patients interacting directly with the computer. It has been argued by some researchers that the computer is capable of obtaining answers to questions that some patients might evade in a physician interview or that by careful wording of the computer questions, some responses may be elicited that would later help the physician in exploring a problem in more detail. Although it might seem that a computerized history is an impersonal way of collecting such information, it can save physician time and provide more efficient use of patient-physician interaction by allowing the physician to follow-up on specific responses from the computerized questionnaire. It also insures that all the pertinent questions have been asked and that the negative responses are documented. It offers the significant advantage over paper questionnaires of providing "branching" which allows the computer to pursue detailed information about a particular problem if it is present, but does not bother the patient with detailed questions on a disease or symptom if the patient indicates he does not have such disease or symptom. Obviously the "user friendliness" of these types of programs needs to be extremely high because they would be used by persons with no previous exposure to computerized interactions.

Communications • The microcomputers (or personal computers) have the capability to communicate with each other and with larger computers.

Within a building, the computers can be connected to a common wire to enable them to exchange information with each other at very fast rates. This arrangement is denominated a local area network (LAN) and is receiving a lot of attention.

The computers can also communicate with each other via telephone lines. To do this, a modem (modulator/demodulator) is used to convert the data to a format compatible with telephone lines, achieve the transmission and then through another modem, recover the signals to feed them into the destination computer. There exist national networks, accessible through regular telephone lines which offer special quality telephone lines, satellite communications and protocol compatibility between different computers to make it possible for different types of computers to "handshake" with each other.

Physician's offices would benefit from computerized communications to the following locations:

(a) Hospitals — Through his office computer, the physician could communicate with the hospital and access information on his/her inpatients to check for instance if the results of previously ordered laboratory tests have been reported into the patient's "electronic chart".

(b) Third Party Payors — It will be possible in the near future for the bills from the office to large third party payors to be sent by the computer over the telephone.

(c) Literature Searches — The National Library of Medicine offers a national service called MEDLARS whereby abstracts for scientific articles can be listed on line, by submitting key words or names of authors.

(d) Clinical Assistance — Many programs that assist clinicians in diagnostic and therapeutic services are available over the telephone. There are programs that try to reach a diagnosis based on symptoms and laboratory results that are fed to them. Programs in narrow fields such as thyroid disease and electrocardiography (which requires special equipment to transmit the heart voltages over the telephone) have practical use. Programs that attempt to diagnose illness in all areas are still in a developmental phase. The physician can also access programs to monitor drug interactions for patients being prescribed many drugs simultaneously.

Human-machine interface • The most challenging problem for hardware and software developers is to facilitate the interaction between humans and machines. Once the information is within the computer it can be stored, retrieved, processed and displayed with great efficiency, but the input step is still cumbersome. In the hardware realm, efforts are being made to provide alternatives to the traditional entry device, the keyboard (because many people are not expert typists). Some ingenious solutions include: (1) the mouse — a gadget that is rolled on the desk and causes a pointer on the cathode ray tube (CRT) screen to move to the desired position; (2) the joystick — which has become the standard for children's computerized video games; (3) light pens — where the user indicates his/her preference by touching the appropriate box on the screen with a light pen; (4) touch sensitive screens — where the same effect is obtained by touching the screen with

one's finger; (5) voice recognition systems — practical in restricted industrial environments are being developed further to achieve the necessary reliability to make them practical in an office setting.

The ability to enter information in a variety of ways still requires great ingenuity on the part of software developers to make the programs as "user friendly" as possible to minimize the training required from the user to interact successfully with the machine. This is a critical step in the physicians office because the physician will not personally operate the computer if he/she has to remember too many magic words and commands in order to achieve his/her objective.

Integration of functions • The price performance ratio for microcomputers will continue to decrease, new and improved systems are being announced almost everyday. The relatively low investment required for becoming a software developer has made it possible for thousands of companies and individuals to enter the field. This competition has produced ever improving software products at very low prices.

At the moment there exist software packages which perform the functions of accounting and billing, word processing, storage and retrieval of medical records and communications very efficiently but separately. Many groups are actively attempting to achieve the integration of all of those modules so that data can be easily interchanged among them, an essential requirement for a smoothly functioning physician's office.

On the other hand, in the physician's office the major consideration should be flexibility and continuity of support. As the needs of the office evolve and as new hardware capabilities become available, the office system must adapt without disruption of the office activities. This dictates that the physician must be assured of the capability of the vendor to provide this long-term hardware/software maintenance, upgrade compatability and training.

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Hospital information systems: Foundation for integrated medical information

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Computer systems are proliferating in hospitals. In some hospitals, they even seem to be metastasizing. They have broken out of the billing department and the controller's office and are assuming an ever-broader role in support of patient care. Computer systems that are integrated into a hospital's operational structure are generally called "hospital information systems." The rapidly increasing rate of installation of such systems suggests that there is a widespread expectation of significant operational and financial benefits to the hospital. We believe the tangible benefits of a properly conceived hospital information system also extend to the patient and his physician.

Although a hospital information system (HIS) is difficult to define precisely, beyond considering its operational role in the institution, we believe the term should be reserved for systems which are:

- "On-line" systems, i.e., ones in which users have essentially immediate interactive access to the data stored in the system and can make changes to that data directly from a system terminal, these changes being effected while the user is at the terminal. To avoid user frustration, the system must respond promptly and consistently to the user's requests. Our experience suggests that nearly all requests should be executed and acknowledged within one second, certainly within two.
- Designed around an integral "data base manager," a computer software component that stores and retrieves data within a specific structure defined to suit the needs of the particular hospital. Although this is actually a question of software design, it has profound functional implications. In an institution as diverse as a hospital, many

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different classes of users, each with a different job to do, will require access to different subsets of the data. Using a data base manager greatly simplifies the implementation of such a system and facilitates access to the data stored in the system, providing each user with his own "view" of the data, oriented toward the specific needs of his job and subject to appropriate data security considerations.

- "User-oriented" systems — The typical clinical user should be able to use the system effectively without extensive technical training or constant reference to instruction manuals or printed lists of codes. The ideal user-oriented system can deal gracefully with users of widely differing levels of experience. It contains within it sufficient "help" facilities to prompt a new or occasional user through all the functions which he is authorized to perform, yet it does not burden experienced users with redundant information.

While existing HIS implementations constitute a continuum of functional capability, it is useful to distinguish three general levels of installation objectives:

- Data entry/charge capture — The majority of existing systems represent this level of capability. In an institution as complex as a modern acute-care hospital, this is no trivial objective. For some systems, however, it is an interim goal that serves as a foundation for higher aspirations, as additional application programs are developed. Systems at this level typically maintain basic demographic, financial, and census information on patients, collected initially upon admission and updated during the patient's stay. Orders for certain hospital services are entered from nursing units. Some such systems simply record the orders; others transmit the orders to the appropriate performing location. In systems at this level, the primary focus of the census and order entry functions is to capture a complete record of charges for patient services and charges for room occupancy, as well as sufficient demographic and financial information to support patient billing.
- Order entry/result reporting — On the surface, systems of this level of sophistication may differ only subtly from data entry/charge capture systems, but they are more tightly integrated into the operational procedures of the institution. They help to *manage* the hospital's admission, discharge, and transfer (ADT) activities, rather than just record them. The primary focus of order entry at the nursing units is to notify the performing locations, perhaps even to help manage the work flow at the performing locations. Results are reported back to the nursing unit where the patient is located, or are available for inquiry by authorized personnel at any terminal. The record of patient charges and room charges is a by-product of the system's operational role, not an end in itself. Such systems typically coordinate scheduling of hospital resources, as well as follow-up clinic visits. They often maintain data to support medical professionals in assessing patient condition and evaluating treatment, including selected historical data from previous patient visits. Finally, such systems are usually capable of greater integration with the hospital's administrative computing fuctions, such as billing, inventory, and payroll, to produce routine management reports and to support hospital planning activities.
- Clinical analysis systems — The singular enhancement that distinguishes this class from the preceding two is automated monitoring and analysis of clinical data, with the aim of identifying situations of potential medical significance, such as the adverse interaction of two ordered drugs, or the interaction of a drug with a physiologic abnormality reflected in the laboratory results, which might pose a risk to the patient. The system may also suggest diagnostic possibilities. The purpose of these systems is not to replace medical judgement, but rather to augment the information base available for review by the physician and relieve him of the mundane chore of carefully examining routine data to detect incipient trends. In these systems, each physician typically defines a personal set of "protocols" that specify which data are to be monitored and what analyses are to be performed on his patients. One physician might wish to be alerted to every low hematocrit; another might want to be informed only when the hematocrit is falling.

Although these latter features are implemented in very few existing HIS installations, they should ideally be incorporated into the same system architecture as the functions described above. In a hospital, no datum is purely clinical, purely operational, or purely administrative. Every lab test, every pharmacy order, has distinct clinical, operational, and administrative attributes. To deal efficiently with all of these implications demands a single, coherent HIS architecture.

While it would be impossible in a single paper to detail each of the potential functions that might be supported by an HIS, we will consider the general types of functions, review the implications of such systems for the practice of medicine, and discuss the process of selecting and planning for the installation of an HIS. We hope to provide medical practitioners with an appreciation of the opportunities which such systems offer, as well as an understanding of the efforts required to realize that potential.

A functional view of the HIS • We propose to describe here the kinds of functions typically performed by hospital information systems and to discuss some of the clinical implications of turning these tasks over to an HIS. There are also many fascinating technical considerations in determining the appropriate computer hardware and systems software for an HIS application, but we shall limit this discussion to the functional features of such systems. We must emphasize that this discussion is far more general than the highly detailed system description that each institution should develop for itself prior to acquiring an HIS.

There are several key functions included in virtually every HIS. We must know who the patients are and where they are located, hence the fundamental role of the master patient index and census functions. All other patient-oriented functions of an HIS, such as order entry for the Laboratory or Pharmacy, begin with identifying the patient involved, and this is accomplished using information collected and maintained by these two basic functions.

The master patient index (MPI) is a list of every patient who has ever been assigned a medical record number (or patient identification number) and may potentially return to the hospital. For most institutions, this is a very large group indeed, and therefore only a limited amount of information is retained for each patient, unless the patient has had recent contact with the hospital or perhaps its associated outpatient clinics. The objective is to store, along with each medical record number just enough information to identify uniquely the patient to whom the number belongs, using practical indicators which will enable Admitting Office or Clinic Registration personnel to associate the correct medical record number with each patient or to determine that the patient has never been assigned a number.

This sounds straightforward enough, but it is a very difficult task. It has, of course, traditionally been done manually, using an enormous card file in the Medical Records Department, where such data as the patient's name, other names formerly used, date of birth, sex, race, and mother's maiden name are recorded for each medical record number, along with some limited cross references. Unfortunately, an HIS can do little to fundamentally improve upon this traditional set of data elements, until the technology for something like automated recognition of fingerprint or eye ground patterns becomes practical, and even these are not likely to be foolproof. Although it still uses the same basic set of data to maintain the MPI, an HIS can nonetheless make the data more conveniently accessible to those who need it, and it can also make certain that everyone is working with a complete, current copy of the data. Admitting personnel need not phone a file clerk in Medical Records to search for a medical record number when a patient presents for registration, and they will also have available the patient's new address, collected just last week in Clinic Registration, although this data might still be waiting on a list of changes yet to be posted to the manual card file.

This theme is fundamental to understanding a major immediate benefit of an HIS. Even without making any substantive changes to the kind of data used to conduct hospital functions, an HIS can serve a crucially important role just by making those data available more quickly and more conveniently to the people who need the information, without the unnecessary delay, clerical labor, and potential for errors and omissions that keeping separate manual records in several different departments entails. In the future, the computer's potential for storing and analyzing large volumes of data will likely change the *kind* of information that hospitals and physicians use. In the meantime, however, just making traditional kinds of information more conveniently and more accurately available is a significant benefit that can be achieved with available technology.

In the MPI function, typical HIS installations allow the system to assign a new number to those patients for whom no existing number can be found and then to request collection of the basic patient identification data for future use. Once a patient becomes active, through an admission to the hospital or a clinic visit, the scope and volume of necessary data grows considerably, and the HIS then functions in the collection and management of these data. For returning patients who have been seen recently, the data may already be in storage and can simply be retrieved for review and correction, as necessary. Data collected at this point usually include detailed demographic information, employer, person(s) to notify, next of kin, insurance coverage and other financial data, and medical information that should be generally known, such as allergies.

Although it is intuitively appealing to consider saving all patient data indefinitely once it has been captured, two factors weigh heavily against this strategy. First, experience shows that detailed demographic data has a very short half-life: its utility declines rapidly with age, in our highly "mobile" society. In contrast, clinical information from earlier encounters is more likely to retain its relevance, but soon its volume becomes so great as to preclude its effective use, unless it is summarized in some way, as we shall discuss below. Second, maintaining on-line more than the minimum identification data for long inactive patients would impose on the system a data management burden that would either degrade system performance (longer response time) or demand a much greater financial investment, to purchase computer hardware capable of handling massive amounts of on-

line data without impacting system performance.

We caution against undue concern about the latter point, however, since we are now at a stage in the evolution of computing technology at which virtually all the clinical and administrative data relevant to the care of active patients can be managed on computer systems whose cost is "reasonable," compared to the direct and indirect savings that can be expected to result from their effective use. Moreover, data whose on-line storage can no longer be justified may be moved to inexpensive off-line archival storage media, where they can be accessed through the computer with some advance notice, or they can be written to microfiche (along with an appropriate index), where they will be available for manual access. We raise this issue not to suggest that on-line storage limitations often preclude implementation of otherwise valid functional features, but only to emphasize that all on-line data storage and processing entails a cost, which must be balanced against the expected utility of the data in carrying out the hospital's administrative and clinical functions.

In addition to the master patient index, a second essential HIS function is the ability to maintain an accurate record of the location within the hospital of each active patient. Beyond the obvious value of having access to an up-to-date census from any terminal on the system, current patient location information is a prerequisite to many of the other HIS functions discussed in the following paragraphs. Patient location data are maintained by the admit, discharge, and transfer (ADT) functions, which are employed to assign a patient to a room or bed, to move him between rooms or beds, or to discharge him, and to notify automatically those hospital areas that need patient location information, such as the Phlebotomy Team and the Dietary Department. The ADT module may include routines to search for an appropriate bed for a specific patient, considering such factors as isolation requirements, hospital service (medical, surgical, obstetric, etc.), and, for semi-private rooms, the patient's sex, whether he smokes, and his preference for a bed near the window or next to the bathroom. The system typically allows a bed to be placed into a hold status until the patient is ready for it, and automatically notifies Housekeeping as soon as a patient is discharged, returning the bed to an available status only after Housekeeping has completed its work. (The system might also support separate inspection of each room by a Housekeeping supervisor, placing the bed into a tentatively available status as soon as the housekeeper has finished his work and notifying the supervisor that the room is ready for inspection; the system would actually release the bed as soon as the supervisor completes his inspection. The housekeeper and supervisor would each be known to the system by their own unique identification codes and passwords; each would receive notification of his duties and would enter confirmation of their completion through an HIS terminal.)

A major installation objective for most current hospital information systems is the ability to collect order data, "edit" it (as part of the order entry process) to ensure completeness and consistency with other data known to the system, transmit the order automatically to the proper service area, and return notification of completion of the order, and the results, if appropriate (as with Laboratory or Radiology exams), to the patient's current location. There are a number of advantages to be gained from using an HIS for these order entry/result reporting functions. An important benefit is a higher degree of uniformity in the order entry process and a reduced rate of transcription errors. This might be achieved by displaying a list of patient names (the census for the patient care unit, for example), from which the desired patient is selected by means of a light pen, so that it is necessary to key in the patient's medical record number. Similarly, the majority of actual orders may be entered as selections from a series of menus, or keyed in using short mnemonic abbreviations.

Much careful thought must be given to the order entry process, since so many different orders are potentially possible. Consider, for example, the number of drugs and IV solutions available from the Pharmacy, and the number of possible routes of administration and dosage schedules. In any hospital, this is a staggering number of combinations. But in order to fully exploit the potential of the HIS to recognize and correct errors at order/entry time, virtually all possible orders must be known to the system in advance, together with appropriate "edit" checks for consistency, completeness, and validity, which may be applied to detect potential errors. The nature of these "edits" is highly variable. Some might simply ensure that the ordered dosage is a reasonable one for the given drug; others might check for recognized interactions with other medications already on order or for other contraindications, such as patient allergies. In virtually all systems which have such capabilities, these warnings are only advisory and can be overridden with sufficient authority. Their purpose is not to control the practice of medicine, but rather to ensure that it is carried out free from inadvertent clerical errors that might otherwise go unnoticed.

Clearly, such automated cross-checking mechanisms can prevent some kinds of errors that might pose a serious threat to the patient and might also place the hospital at risk of legal liability. The increasing specialization of care delivery in modern hospitals makes this function particularly valuable. The HIS can serve as a point of integration where all the orders are brought together and checked against each

other, just before they are executed. In many hospitals, although the patient's physician and his primary nurse may be aware of the entire scope of the patient's care, no single person at the level of actually executing the orders has a sufficiently comprehensive view to recognize inconsistencies and incompatibilities that may arise from transcription errors that might occur *after* the orders have been reviewed by the physician and the nurse.

Order entry/result reporting functions also provide a mechanism to reduce the need for physical transportation of orders and results between the patient care unit and the location where the order is performed. Use of the HIS as a communications network provides for more timely transmission of information, minimizes personnel requirements, and makes it possible to enforce more rigid standards on the information transfer process. Finally, automated order entry/result reporting provides a record of each order and the corresponding answer, already in computer-readable form, eliminating the need for personnel to keypunch charge data from handwritten order slips, as well as the chance of transcription errors — or the chance that these data will be lost altogether.

We believe that scheduling patients and hospital resources represents an area of major potential growth in HIS applications. This is a broad area, ranging for scheduling patients for simple clinic visits through scheduling an entire elective in-patient stay, including admission, major diagnostic procedures, surgical therapy, and the use of intensive care facilities post-operatively. Of course, the inherent uncertainties of unscheduled admissions and our inability to completely predict the course of any patient's stay precludes ever having a totally scheduled hospital, but the fact that we cannot schedule everything does not mean that we should not attempt to schedule a significant fraction of major hospital events and resources much more carefully than they now are, in the typical institution.

The capabilities of automated scheduling systems range from straightforward "computerized appointment books," in which the multitude of constraints necessary to establish correct and efficient schedules remain within the mind of the human user, to systems in which nearly all the rules for scheduling all major resources are coded for use by the system. There are many sequential interdependencies and a vast array of unpredictable factors involved in realistic hospital scheduling problems. It is extremely difficult to specify the rules explicitly enough for the computer to deal effectively with them, yet retain enough generality to make the automated system useful. Nonetheless, the potential gains in efficiency are enormous, from a system that can simultaneously access data on feasible schedules for the numerous different resources that comprise a patient's care and arrange, for example, a multi-step diagnostic procedure in which the exams must be performed in a certain sequence, rearranging the patient's ongoing physical therapy appointments as necessary, all according to pre-defined scheduling rules and all without making telephone contact with the scheduling clerk for each of the individual resources. In addition, a computerized scheduling system can automatically drive a number of other processes. For example, an out-patient clinic scheduling system can automatically print appointment reminder notices to be mailed a week in advance, can print a "pick list" for Medical Records of the patients visiting each clinic tomorrow, and can also maintain resource utilization statistics on instruments and specialized personnel. Within two years, several HIS installations will have at least some of these capabilities implemented.

All of the functions we have discussed thus far have related directly to the medical management and administrative control of a specific patient during a particular visit. But such visits also typically generate large volumes of computer-readable data which, when summarized and integrated, can represent yet a different kind of resource for both the hospital and the physician. For the hospital, this wealth of data can be used to produce management reports on the efficiency of resource utilization, the relative costs for treating patients in each diagnostic category (sure to be of extreme interest, with the advent of prospective payment for hospital services for Medicare patients, on the basis of diagnosis related groups), the demand for nursing personnel by skill level and time of day, and a variety of other information which can help hospitals to operate more efficiently and to provide more timely services.

In addition to all of the operational functions we have discussed, the HIS can also provide a number of more subtle benefits to the hospital, which are related to establishing an "architecture" for information management within the institution. This architecture will likely include as the focal point the computer on which the primary interactive system runs, but it must also encompass the other manual and automated information handling activities within the institution; for it is not just the primary interactive system but all these systems *together* which constitute the comprehensive "hospital information system." This overall architecture, developed at least in general outline during the analysis and planning process which properly precedes system acquisition, will address at several levels such issues as compatibility, completeness, and coherence among the system's various components. The location, method, and personnel for each of the different kinds of data entry, file maintenance, and "report" pro-

duction operations must be defined. Not all these activities will be handled completely by a computer. In virtually every hosptial, some information processing functions will continue to be performed manually. Moreover, we must remember that there is at least one machine-to-person interface at every interactive terminal! This "interface" is at least as crucial to the ultimate success of the system as what happens inside the computer.

In large hospitals, it is not likely that even all the *automated* information processing will be handled by a single computer. Certain specialized tasks, such as support for Laboratory operations and production of ward and chart reports of Laboratory data, may be handled more efficiently on a computer separate from the one on which the "main" interactive systems runs. Hardware and software protocols must be chosen for interfacing the various automated components of the system, to ensure that the various computers and also the automated instruments can communicate with each other. Ideally, with proper interconnection of all the computers, under a comprehensive system architecture, each user can access from a single terminal all the functions relevant to his needs, regardless of which subsystem actually processes the function. All order entry and interactive result inquiry functions for Laboratory procedures should, for example, be accessible through the same "HIS" terminal as all other functions, and in a comparable format, although the Lab functions would actually be performed on the separate, dedicated Lab computer. The fact that these transactions travel across the interface between the "main" HIS computer and the computer which runs the Laboratory subsystem should be completely "transparent" to the HIS user.

With proper initial design of the comprehensive HIS, it is possible to connect a number of seemingly separate systems so that the resulting network retains the desired image of unity to the end user. However, doing this effectively demands more than compatibility of hardware and software between the systems. It also requires a coherent "logical" design, which in turn requires a clear understanding of the hospital's operations and its needs for information at all levels. Data base design is crucial to the success of any HIS. It is even more crucial when the system is comprised of multiple subsystems. Careful thought must be devoted to which data are to be managed within each subsystem, to avoid unnecessary duplication and intersystem conflicts, and to facilitate integration of all the data into a coherent picture for each patient.

Hospitals can expect to derive another major benefit from defining a comprehensive system architecture around which to build an HIS, a benefit which will assume progressively greater importance with the growth of microprocessor-based "professional workstations" for health care administrators and, ultimately, for medical practitioners. Computing professionals throughout the industry are only beginning to come to grips with the organizational and administrative issues raised by this technology, but there is consensus on one fundamental point. These devices will only enhance the importance of the role of the HIS as a focal point for the administrative and clinical computing activities of an ever-growing user community within the institution, especially since these users will be demanding increasingly sophisticated information processing support, as they become aware of these capabilities. This is not to say that all information processing should be done on the "main" HIS computer. Indeed, it is precisely the availability of practical alternatives for certain specialized tasks which demands an established architecture that recognizes these alternatives and places them into proper perspective, with respect to the rest of the system.

Microprocessor-based systems currently support a variety of computing activities that might be best delegated to individual processors within a "distributed" network, including word processing, accounting sytems for individual offices or small departments, certain data capture and editing functions, many kinds of modelling, analysis, and forecasting, and graphical display of data. Concomitant with the revolution in microprocessor technology has been a less dramatic but equally important evolution of software technology which, like the user-interactive software supporting the core functions of of the HIS, is making computing power practically available to a much broader clientele. Newer "front-end" software tools such as generalized dialogue managers can, by approaching users on their own terms, make modelling and graphical capabilities accesible to those with little time for extended training and little interest in becoming computer experts themselves, those whose only interest in computers is as a tool. However, the value of such tools lies in their application to data, and even very sophisticated individual systems are of little practical use unless they have some means of automated access to the data. It is for this purpose that these systems must be integrated into the comprehensive HIS, which can serve both for communication among the individual systems and as a central "coordinator" for all data maintained within the institution, ensuring both data security and system integrity.

All of this sounds a bit futuristic, and it is not yet possible to achieve a fully integrated, comprehensive system in quite the grand and glorious style implied in the preceding paragraphs. The effective integration of separate computing systems requires a level of technical skill not available at all institutions,

especially to design and maintain systems whose security and reliability are appropriate for critical health care applications. Nonetheless, it is certain that without careful advance planning for the collection, storage, and processing of an institution's "information resource," none of this will be possible. With the proper choice of equipment and programs, it is presently feasible, in the typical integrated HIS, for the physician to review laboratory results from his own office and to provide remote access to the system's scheduling capabilities, as well as dial-up access to medical literature abstract data bases. Within five years, it will probably be quite common for a number of small systems to make inquiries into the HIS data bases and to place requests for patient services. It is important to stress, however, that considerable caution is required in the selection of both the hardware and the system software of the HIS and the local computing equipment, as well as in developing application programs for both machines, to ensure that these potential benefits can be realized.

Implications for medical practitioners • We have discussed the current and potential role of the HIS in many of the hospital's clerical and administrative functions. It is perhaps even more important to understand its potential role in supporting the clinical functions which are at the core of the hospital's reason for existence. In our view, the principal benefit that clinical users can expect to derive from an HIS based on current technology and designed to current standards is, paradoxically, very closely related to the system's effectiveness in handling "clerical" chores. Physicians today are both blessed and burdened with vast quanities of data about their patients, and concerns about legal liability for overlooking any hint of an abnormality demand that the data be carefully examined — and frequently that even more data be gathered and evaluated. At the same time, health care is becoming increasingly specialized. This is reflected not only within the medical disciplines, but also by the increasing number of allied health professionals who render care to hospitalized patients. As the size of the "team" grows, the physician's role as its "captain" becomes increasingly difficult to execute, largely because of the practical difficulties inherent in communicating with — and coordinating the activities of — any diverse group of people who must meet a variety of independent scheduling constraints. Of course, each member of the team produces even more data, which requires further evaluation by the physician, and then another cycle begins with communication of his chosen course of action to those who will carry it out.

In this environment, the HIS can achieve the greatest immediate impact on patient care by helping the physician to deal with the "overhead" tasks of data management and analysis, as well as communication with the other members of the health care team. It can provide him the data — and, to a lesser extent, in current systems, the analytical tools — to support his concentration on decision making and problem solving. The popularity of books and seminars promising new insights into "time management" suggests that it is no small achievement for a system to help free physicians from the time-consuming, mundane tasks which are nonetheless required in modern clinical practice, thus allowing more effort to be devoted to intellecual functions which are ultimately more beneficial to the patient and intrinsically more satisfying to the physician.

We do not mean to suggest that this is the highest contribution to clinical medicine to which the HIS can aspire, but in the midst of a great deal of research on elegant "computer diagnosis" methods based on the techniques of artificial intelligence, it is easy to overlook the very practical benefits of automated data management and enhanced communication that can be achieved with current hardware and software technology. Moreover, all diagnostic algorithms must be given some data about the patient, and experience strongly suggests that the utilization of such tools will be inversely related to the amount of data which the physician must personally collect and supply to the system. It is appropriate to view the current work in design of clinical HIS data bases and the operational techniques to capture and integrate clinical data as building an essential foundation for the use of these tools in clincial practice as they are developed.

To be sure, some limited techniques for automating medical decision making are in common use. The most common example is the interpretation of laboratory test results by comparing the value obtained for the patient to a reference interval for patients of the same age and sex, or perhaps comparing a result to a previous result for the same patient, checking for a change exceeding an established absolute or percentage threshold. The HIS (or its Laboratory subsystem) will, as a result of these tests, indicate whether the result falls into a "life threatening" range, in which case the system may demand that the technologist notify the patient's physician (consulting the HIS to determine, in addition to the attending physician of record, which physician placed the order or which physician is on call for the patient's service, and using the beeper system directory on the HIS to facilitate making contact). In such a situation, the system will typically require the technologist to enter a comment documenting this notification.

This latter example suggests another important potential benefit — for both hospitals and physicians — of having the HIS involved in the data manage-

ment and communication process: automatically producing complete documentation of information made known to those responsible for the patient's care and, within limits, recording actions taken in response to these data. Since the system automatically "time stamps" every transaction that enters its data base, its records reflect quite accurately the time course of the patient's management, and many events which are not recorded manually can be fixed retrospectively in relation to events which were recorded automatically. Such records could be of considerable value in demonstrating appropriate and timely response to notification of an adverse clinical condition, should a legal challenge arise.

While such limited interpretive methods as range checking are certainly a great convenience, their principal value could be considered to fall within the first mentioned category — saving the physician's time in looking up the appropriate reference range for unfamiliar tests and freeing him from the need to inspect every result for extreme values. The system does not, in this case, do anything that could not be done "manually," but the fact that it does it consistently, checking every result to determine whether it falls into the "life threatening" range for the respective test, allows the physician to concentrate his attention on more sophisticated interpretive evaluation, rather than diverting some of his energy to be constantly alert for such extreme values of individual test results to which he should react immediately.

A related class of HIS applications likely to have substantial immediate clinical benefit is the cross-checking algorithm which is invoked, for example, upon each drug order to determine whether the patient is already receiving any medications known to interact adversely with the newly ordered drug or to check for a periodic serum potassium value in all patients on digoxin. An extension of this approach includes prompting the physician to order, for example, periodic BUN and creatinine levels on patients receiving aminoglycosides, if such a policy is adopted as standard practice for the institution by the hospital's medical staff. As noted in the introduction, the objective of these applications is to free the physician from having to remember such things entirely on his own, not to limit his prerogative in the practice of medicine.

There are some interpretive methodologies which cannot be performed without the aid of a computer, including the collective interpretation of a group of individual results using multivariate statistical methods. Our patients are not simply a collection of independent physiologic parameters (as the simplistic range checking of each individual value that is conventionally used to evaluate laboratory data implicitly assumes), but rather complex homeostatic systems in which the various parameters are highly, albeit not necessarily straightforwardly, correlated. For this reason, the multivariate approach is theoretically very appealing and it may potentially offer a very important practical benefit in dealing with the increasing volume of laboratory data collected for each patient. If the usual reference range, which is established so as to encompass 95 per cent of healthy persons, is applied individually to as few as 20 independent values measured on a group of perfectly healthy subjects, the cumulative probabilities are such that at least one value will exceed the reference range in 64 per cent of the subjects. While laboratory instrumentation technology makes it feasible to measure a large number of values very inexpensively for every patient, if these values are interpreted in the conventional (univariate) manner, many unnecessary laboratory tests could be done to elucidate spurious "abnormal" results. It is likely that prospective payment for hospital services, with its inherent pressure to reduce length of stay, will encourage performance of more lab work earlier in the hospital stay, since it is usually far less expensive to perform an unnecessary "second-line" lab test than to lengthen the patient's stay an extra day, waiting for the follow-up test to be ordered only in response to an abnormal value of a "screening" test. Multivariate techniques for interpreting broad screening batteries without this statistical pitfall are being developed, but they demand considerable computational capability, making them an ideal application for the Laboratory subsystems of hospital information systems.

While the numerical data generated in the Laboratory are relatively easy to incorporate into an HIS data base, since in most large hospitals these data are conventionally processed by Laboratory computer systems and thus available in computer-readable form, and while diagnostic models of great practical significance can be developed to utilize these data, it must be recognized that there are few diseases which can be diagnosed exclusively from laboratory data. In order to employ realistic diagnostic algorithms of general applicability, it will first be necessary to collect certain crucial clinical data and incorporate them within the HIS data base. Definition of which data elements are of the greatest diagnostic value depends on the particular diagnostic algorithm, but it is likely that a substantial part of the history, i.e., the physical examination, and the patient's past medical history would be needed to support diagnostic aids of any appreciable generality. Although capture and storage of the other clinical data would likely be quite difficult, it appears that the HIS could supply a summary of at least that part of the past medical history which involved encounters with the same institution, based on the discharge abstract coding which is now done by all hospitals.

Accrediting agencies and third-party payors require that all patients discharged from hospitals have their diagnoses and procedures coded using the ICD-9-CM system (International Classification of Disease, Version 9, Clinical Modification). In addition, most hospitals abstract additional data elements from the chart of every discharged patient, and many hospitals employ commercial services to manage these data by computer. Were this discharge abstracting function incorporated into the HIS, these data could serve as (very brief) summaries of previous hospital admissions. Experience suggests that the coded discharge abstracts are more useful for subsequent clinical purposes if the physician is provided feedback on the codes which are assigned, as a result of the diagnoses and procedures he writes on the "face sheet" of the chart at discharge, as well as those which are discovered by Medical Records practitioners during the abstracting process. Giving the physician the opportunity to review and correct the codes which have been assigned not only improves the accuracy and completeness of the abstracting and coding process, but it helps to establish the credibility of the system in the physician's eyes. With the advent of hospital reimbursement on the basis of diagnosis related groups (DRGs), hospitals will certainly devote increasing attention to medical record abstracting. Many institutions will undertake concurrent review of diagnoses and therapy by medical records personnel, with tentative DRG assignment while the patient is still in the hospital. An abstracting system which is part of the HIS and thus accessible from terminals in the patient care areas would greatly facilitate this process and would likely enhance physician involvement.

This is, however, a long way from the totally computerized in-patient medical record, which would presumably contain sufficient detail to support automated diagnostic aids, but the issue of abstracting brings us back to considering our first point. To capture the entire medical record in computer-readable form necessarily presumes a very much more structured format than most hospital charts now follow and/or some coding methodology for nearly every data element in the chart, if the data are to be used for anything more than merely reproducing the English text. Setting aside for a moment the difficulty of this task, the result would still be an enormous volume of data and to review the entirety of it, using current computer technology, would likely be even more tedious than thumbing through a paper-based chart. We risk burying the physician even deeper in a mass of data. Although there are several out-patient information systems which rely on a "totally electronic medical record," it is not likely that their success could be straightforwardly duplicated in the in-patient setting, because a far greater volume of data is associated with the typical inpatient hospital admission than with the usual out-patient clinic visit.

In order to meet the physician's legitimate need for a readily-digested summary of the course of a patient's diagnosis and therapy over previous admissions without being buried in the detail of all the Laboratory results (or the complete history and physical plus the daily progress notes and also the nursing notes), an enhanced version of the present medical record abstracting process is probably the best compromise for the forseeable future. This accomplishes the dual purposes of distilling and organizing the data into a succinct form — which can serve both as a summary of the patient's past medical history (at the same institution) and also as a "table of contents" to the cumulative medical record — and also keeping within reasonable bounds the requirements for on-line storage space in the HIS data base. Although abstracting some additional data might be deemed necessary, the marginal cost of this activity is probably small, since the medical records practitioner has already spent some time becoming familiar with the patient's hospital course, and this cost is particularly offset by integrating the abstracting system into the HIS, which can probably supply automatically some data which must now be found manually.

The potential value of the HIS data base for clinical research is frequently cited as a major potential benefit of HIS installation. A good discharge abstracting and coding system serves not only as a table of contents to the medical records of individual patients, but also to the clinical experience of the entire institution. Within the limits of the resolution inherent in the coding system, the level of detail which the hospital has chosen to include in its abstracts and the accuracy with which the codes are assigned, searches of this data base are invaluable in selection of retrospective cases relevant to a wide range of research topics. Beyond this, however, we caution against unrealistic expectations. The data base of a typical HIS is constructed as a means to an operational end — recording patient financial and demographic data for billing purposes, order entry and result reporting within the hospital, capture of charges for patient services, and so on. To be sure, high volumes of clinical data (Laboratory values, Pharmacy orders, Radiology results) pass through the system, but the data base itself is something of a by-product in which data are stored "incidentally." One has little certain information about the confounding conditions (e.g., nutritional status) that may affect the lab values stored in the data base. Often there are many useful clues, especially if the discharge abstracting process is refined and extended beyond the data set captured by most typical hospitals, but this process is always limited by the information

recorded in the chart — and the physician who recorded those data almost certainly gave little thought to the patient selection criteria for the research study yet to be designed that might wish to use his patient's lab values which happen to be available in computer-readable form, in the HIS data base. We believe that the value of such uncontrolled "incidental" data, beyond a few very limited research purposes, is quite limited, and in ordinary circumstances this should not be a major motivation for installation of an HIS.

We have not discussed in any detail the methodologies for assistance in clinical diagnosis which are now under development in a number of hospitals. Systems are, of course, in routine use for automated interpretation of electrocardiograms and systems specialized for handling certain kinds of data, such as pulmonary function testing and arrhythmia monitoring are commercially available. Apart from these, however, most "diagnostic" systems are implemented only in pilot form and rely on input of specific data about the patient which it does not appear to be feasible to collect routinely with current HIS technology. Current technology does provide a basis for study of the process of capturing and subsequently using a broader range of clinical information, concomitant with the continuing development of systems which will need it. An HIS also provides substantial immediate benefits to the clinician through efficient management and presentation of the large volume of clinical data which it does routinely handle, potentially allowing selective display of multiple parameters against time, and with the addition of graphics software and graphics output devices, in the form of a time-trend plots. It appears that the development of better tools for management, analysis, and presentation of clinical data is likely to be a particularly fruitful area for further work.

HIS planning and installation • As with all complex systems — computerized or otherwise — the potential of any HIS can be realized only with considerable planning and careful attention to detail during the installation process. The extent to which such systems meet the needs of physicians or hospital administrators is highly dependent upon the degree of meaningful input which they have contributed, starting with the initial planning and analysis and continuing through the selection, installation, and operational phases. In this respect, the broad flexibility of these systems is both a blessing and a curse. Without the proper input at the proper time, many of the features having the greatest potential utility for physicians may not be considered for installation or may be implemented in a manner that limits their practical value.

The acquisition of an HIS may be divided into a number of discrete tasks which are performed in more or less sequential phases. The initial step, the functional definition, serves several purposes. It makes hospital personnel and the medical staff familiar with the nature of functions which are available on typical HIS products. It also causes them to begin thinking about the desirability of particular functions and how these modules should be implemented, including their links to existing systems. During this phase, someone should repeatedly emphasize a point that we have made earlier: the computer is not the system. It is merely one (automated) component of the hospital's total information processing apparatus, much of which will probably continue to be based around manual systems. Even the most highly automated system is connected on both ends to at least one human user who knows something — or wants to know something — about the patient.

This phase is in some sense contemplative. It is important to choose representatives from each area of the hospital and from the medical staff who understand the institution's operations and who are willing and able to invest a good deal of time and difficult thought, trying to fit the organization's needs into a framework which facilitates precise definition of functional features and assignment of priorities. This phase cannot, however, be based entirely on the introspection of a few knowledgeable individuals. Once a possible framework has been worked out and documented, it must be validated against actual operational procedures and the perceived needs of a much broader group chosen to represent a complete cross section of the potential users of the HIS. Soliciting input to this process from a large number of people not only strengthens the final product (providing the process is well managed), it also builds a broad base of potential advocates for the system who feel they have contributed to its definition, and it may help to identify potential candidates for the ongoing multidisciplinary team that will be needed in later stages to guide the installation process.

It is categorically impossible to install a mature HIS all at once. Some components must logically precede others; for example, the MPI and ADT modules must be in place, to serve as a basis for all the other functions that begin with identifying an individual patient. But many functions, particularly among more sophisticated features likely to appeal to the medical staff, are more flexible, and the hospital and its medical staff must select those functions which they consider to be of the highest priority, those which are highly desirable, and those which would be nice but are considered less necessary. The potential benefit of each feature, either in patient care terms or in financial terms, must be at least

roughly quantified and weighed against its cost (which can be expressed in terms of diversion of computer or personnel resources that might be devoted to other functional features, in terms of delay in the target date for implementation of the system or in purely financial terms).

The second phase of the process is to solicit information from potential vendors about their HIS products. Experience suggests that this process must be carefully controlled so as to provide a clear basis for comparison. The detailed functional description and priority ranking developed in the initial phase is ideal for this purpose. An effective approach is to convert the functional description into a questionnaire which can be sent to potential vendors for completion. Other information which vendors should supply in a standard format includes a summary of the hardware and software which comprise the system, a list of other institutions they serve, and a summary of the costs of the system broken out into hardware, system software, application programs, installation fees, and maintenance costs. Data on the vendor's market and financial position should also be sought, both from the vendor and from objective industry sources. These data provide a basis for careful comparative evaluation of the alternatives. In a number of facilities, evaluations of the various different types of data are conducted independently by separate groups who are unaware of vendor responses in other areas. For example, the applications group may review the vendor's responses to items related to functional features of the application software but not have access to hardware data or financial information about the vendor.

Involving representatives of the ultimate user population provides a better evaluation of the true utility of each offering. A valid and valuable secondary purpose is to involve more people actively in the selection process, which helps diffuse througout the organization an understanding of the trade-offs that are necessarily involved in any decision of this kind. Installation of an HIS will engender radical changes — or at least fears of radical change — in every corner of the institution. These concerns will be eased if a broad base of support within the user community can be developed during the selection and installation process.

No matter how carefully any vendor questionnaire is structured, it is still essential to visit one or more sites where the product offered by the vendor is in actual operation. These visits should be limited to the two or three vendors whose responses most closely match the needs and resource of the hospital. Sites should be chosen for their similarity to the institution considering the acquisition, in terms of size, patient mix, organizational structure, medical staff characteristics, and financial resources. These visits serve several purposes, including validation of the vendor's responses to the questionnaire, evaluation of how the users at the visited site deal with and accept the system, and review of the nature of the vendor's dealings with the visited hospital, including their response to the inevitable problems that occur during HIS installation. With all these data in hand, one should reconsider the written vendor responses and seek clarification of major uncertainties. This information will generally be adequate to support a final vendor selection.

The experience of many hospitals suggests that the selection process should not be narrowed to a single vendor until there is a mutually acceptable contract and unambiguous evidence that the system to be purchased is working effectively at other sites and can, in fact, be delivered. While a primary vendor may be identified, it is prudent to continue working actively with an acceptable backup vendor, in the event that experience during contract negotiations or new data on system performance later reduce the desirability of the primary vendor.

Except for systems whose sole objective is data capture, successful specification and installation of an HIS demands meaningful participation by personnel not associated with Data Processing. It is important to establish the proper installation team early and maintain contact with the broad user population throughout the process, informing them of what is planned and soliciting input and support long before the first function is scheduled to become operational. In many institutions, this is accomplished by forming HIS committees which serve in an oversight and review capacity for the installation process. With the dramatic improvements in computing technology that have been achieved in the past decade, the majority of the effort required to install an HIS is not in programming, but rather in the areas of detailing the applications, defining and developing interfaces between automated systems and the manual procedures that will be used together with them, in developing documentation for use by the users and those who must maintain the system, and training the user population to incorporate the computerized system within the overall work flow.

It is tempting to comtemplate the thought that once all the activities we have described are complete, a "finished" HIS will exist which will require no further enhancements of future modifications. This is a fantasy. No system installed in an evolutionary environment can remain static and retain its utility. Pressures for change in an HIS come from a number of sources. User experience with the system will suggest alternative means of achieving the same end which are more efficient for the user or better fit the overall processes within which an HIS application functions. Changes in reimbursement regulations or accreditation requirements may dictate changes in

the kind or amount of data collected, or they may demand implementation of new routines to reduce data to a mandated form. As the environment evolves, a number of new functional features may come to offer sufficient benefits to justify their local development or their purchase from the vendor. Some changes can be made without modification of the existing hardware; others will require fundamental change of the hardware or system software. As with the initial installation of an HIS, changes of this magnitude must be evaluated and guided by an appropriate oversight body. An HIS is — and should be — an evolutionary system, continually growing and accommodating to change in a deliberate way, to better meet the needs of its users and their patients.

Summary • Although the HIS has often been viewed primarily as an administrative tool, these systems can serve a number of clinical needs as well. They facilitate communication among all the diverse personnel who must act in concert to support quality patient care, they help to integrate hospital operations under a coherent architecture for information sharing, and they allow hospitals to exploit the synergism within the information resources of clinical and administrative operations, formerly regarded as independent entities but now increasingly interdependent, in an era of prospective payment for hospital services. The full potential of such systems has only just begun to be realized, but the hospital and its medical staff must recognize that effective use of these resources — systems of a magnitude and a level of integration only recently made feasible by advances in computing technology — requires careful prior consideration of functional requirements and the operational consequences of system implementation. Only if physicians participate actively in the processes of system specification, selection, and implementation, can the resulting systems be expected to augment the physician's productivity and effectiveness in providing patient care.

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Computers in laboratory medicine

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ABSTRACT: Computer systems have played and in all likelihood will continue to play an ever increasing role in laboratory medicine. The desirable software system will vary from laboratory to laboratory and from institution to institution, but all should have certain common features. Some of the features and criteria upon which to select or design laboratory systems are delineated.

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During the twentieth century, the practice of medicine pertubated. One aspect of this change was the increased usage of various tests and procedures. With the increased usage and reliance upon the results, there quite naturally arose the existence of specialized functional units to perform the test; namely, numerous specialized laboratories.

In the last half of the century, computers and information processing technology have made an ever increasing impact upon society in general, and seemingly inevitably upon the practice of medicine. The emergence of computer techonology has had, and in all likelihood will continue to have its impact upon society, and may be compared to the industrial revolution. Just as the industrial revolution caused rapid and turbulent changes which left the world a very different place, the computer revolution has the potential of causing even more drastic changes. Hopefully, society can manage these events so that there is not a computer revolution, but rather a computer evolution. It may be a utopian hope, but this time society should be able to find ways to manage the violent turbulent changes of a revolution and guide these forces into a more productive, evolutionary process.

Over the last few decades as computer technology became available, the practice of medicine was quite naturally affected first and foremost in the area of the laboratory. This is most likely due to the fact that a computer is an analytical machine, and within medicine most analytical processes revolve around various laboratories.

In the early 1960's the Laboratory of Computer Science was formed at the Massachusetts General Hospital. Since then the Laboratory of Computer Science has been involved with designing, creating,

implementing, and providing information processing technology for use in medical care delivery. The Laboratory of Computer Science operates more than 12 moderately-sized computer systems and many micro-based machines employed in the delivery of health care. Each of the various applications is written in the MUMPS® (Massachusetts General Hospital Utility Multi-Programming System) language.

Currently, with respect to laboratory function, these computer systems support a number of laboratories, namely: The Acute Care Laboratory, the Bacteriology Laboratory, the Cardiac Immunodiagnostic Laboratory, the Chemistry Laboratory, the Clinical Neurophysiology Laboratory, three different Hematology Laboratories including Urinalysis, Histocytic Logic Antigen (HLA) Laboratory, the Pathology Department, the Pediatric Microchemistry Laboratory, the Pulmonary Function Laboratory, the Radiology Department and the Thyroid/Endocrine Laboratories.

Purpose • Today it is likely that most medical laboratories either have or soon will have some form of computer system employed to assist in its function. To this end, laboratory directors and personnel, physicians and health care administrators and managers have had and/or will have to select or design the appropriate system. The purpose of this work is to describe and detail some of the features which should be sought and some primative ways to evaluate the system designs.

A computer system • While it is arbitrary and simplistic, a computer system can be divided into three sections: the hardware, the software, and the firmware. The hardware is most tangible and consists of the physical processor, memory devices, terminals, etc. In general, while the hardware receives the most attention, publicity and sales hype, it is the least conceptually important of the components. Hardware is classically oversold by the vendors while quality and price vary.

Software is the executable instruction stream which causes and directs the hardware to perform or not perform the tasks. Thus, it is the least tangible but most important aspect of a computer system. Most of the evaluation time should be spent on software selection rather than hardware, therefore the hardware should then be selected to serve the software needs and capacities.

The third component is firmware, which is software that is more or less permanently committed to a hardware configuration by using certain devices such as UVEPROM (UltraVioletlight Erasable Programmable Read Only Memory).

Build versus buy • The most basic decision point is whether the laboratory unit will purchase the system from a vendor or whether the system will be created more or less in-house. Here, there is no single clear cut answer, as each institution will have varying needs, requirements and resources.

If the institution has the in-house capabilities and expertise, then building may be advantageous. Conversely, if there is little in-house expertise, then purchasing may be more reasonable. Creating software systems can unfortunately be expensive and time-consuming. In this regard, if the decision is to build, then a high level computer language should be used to speed development and facilitate the changes which will inevitably come. Purchase of a system is however not without pitfalls. Seldom are the true total costs disclosed and it is rare that the final costs are initially accurately forecasted. The quality of the vendor is important, as well as the vendors stability. Systems which seem cheap at first glance, but then do not do the task, or are not supported, or cannot be changed to accomodate a changing environment are not cheap in the long run.

Probably the most important aspect of this decision process is the realization that a computer system can be an effective means of enforcing policy decisions but is a very poor means of deciding what the policy should be. Thus, when introducing a computer system, the policy questions should be openly and candidly addressed. When the decisions have been made, then compliance can be encouraged by the system. Here again, purchased software which conflicts with or does not serve the goals, needs, policy, or requirements of the institution is not inexpensive. Lastly, whether it is built in-house or purchased, the parental unit will inevitably be changed and the implementation will be less than successful if the required policy, management, administrative, and personnel issues are not openly addressed. For as Peter Druker wrote in *The Age of Discontinuity*, "there is nothing sadder than to see something done efficiently which should never have been done at all."

User friendly • User friendly refers to software that is written so that it does not require massive amounts of training to operate or understand. While there are all gradations of friendliness, some salient features of preferable software include the availability of an "on-line" help function which explains to the user the options at each of the various points. Another hallmark of user friendly software is that it uses the nomenclature of the user and not computerese. The dialog between the system and user is in the natural language and nomenclature of the user. Software that requires the knowledge and/or

memorization of computer codes is not user friendly, and therefore is to be avoided. In the final aspect, user friendly software attempts to humanize computer systems rather than to computerize humans.

Fault tolerant • Fault tolerant computer systems are those which have the sophistication to handle problems as they occur without creating major catastrophies. Most fault tolerant designs are based upon the premise that no single failure may cause the system to create a catastrophic situation.

Probably the most important fault tolerant design feature in a laboratory system involves protection and recoverability of the data base. For instance, as the various automated devices and instruments report their values to the computer system, these changes to the laboratory data base should be protected in such a way that an isolated equipment failure cannot cause the data base to become invalid and, thus, non-recoverable.

When evaluating a computer system, one should examine the system with a series of "what if" questions. Are the required mechanisms in place to handle failures? Do the required procedures exist, be they manual or automated, to provide for protection of the data and acceptable operation of the laboratory's function in the face of adversity?

Security and audit trail • In a typical manual laboratory, security and audit trailing of who was told what, when, is a matter of personnel policy. In fact, often times because of the fragmentation and inaccessibility of information, a manual system is remarkably secure. Unfortunately, this is often the case when individuals with the need and right to know cannot acquire the required information in an acceptable time frame with a reasonable amount of effort.

There is no doubt that an information system can greatly facilitate the retrieval and dissemination of information. However, if is equally clear that patients have not given up their right to have the information treated with confidence and that physicians, laboratories, and institutions have the responsibility of protecting this right by protecting the information from unwarranted disclosure.

Another aspect of security involves the recognition that all users are not equally capable. Thus, preferred software allows users to be treated differentially with some being granted the priviledge and responsibilities of certain tasks, while other users cannot even find out about the existence of the denied function.

The subject of audit trailing compliments that of security and refers to the documentation of who did or knew what, from where, and when. Within the laboratory, this attempts to assign responsibility for the data. Thus, for example, the facility to record which instrument did the determinations, which technicians made the decisions, etc., should be available and this information recorded with respect to accession of the data. The software should have the capability of recording who learned or did what from where and when.

Accessioning the work to be done • One of the most critical aspects of any laboratory system is a well defined means of defining what is to be done. Without a clear definition of what is to be done, it is obviously impossible for any system to monitor and bring into compliance the resulting work when it is unclear what should have been done.

Work management • The computer system should assist the laboratory in managing the workload. The appropriate division of the tasks and assignment to work station or instruments should be done. Good work management can expedite the flow, reduce time delays and isolate lost or mishandled work at an early point in time, when the errors are most likely correctable.

Quality control • A very important aspect of most laboratories is that of quality control. The computer system should assist the laboratory in performing and documenting various calibrations and standardizations. Appropriate control determinations should be included and the various judgements made and documented as to the acceptability of the control values. Also, it is often desirable to have the capability of replicating the patient samples multiple times using the same or different instruments and making the required judgements as to this sort of process variability.

Each laboratory should be using some form of reference values if these are appropriate for the determinations. If these values are exceeded, then the software should note these unusual occurrences and implement the policy of the laboratory. For instance, many laboratories require that the unusual values be repeated and verified.

Trend analysis • Often a laboratory may be requested to do repeated determinations over time. Thus, the same patient may have multiple determinations of a test value. Trend analysis refers to the process of comparing the most recent result to the previous results.

The utilization of trend analysis within a laboratory when appropriate can yield two general benefits. First, it can help to isolate and identify

laboratory errors prior to dissemination of erroneous results. For instance, suppose a given patient had multiple hematocrits done during a hospitalization and the most recent value was considerably lower than the previous values. This finding may cause the laboratory personnel to repeat the determination and thus discover incorrect sample preparation or that two different patient samples have been inadvertently exchanged. Second, if the newest value appears to be correct, it may signify occult or other forms of blood loss from the patient. This finding may then be communicated to the patient's care teams for further evaluation.

Another example might be the case of multiple determinations over time of Blood Urea Nitrogen (BUN). A set of results showing a precipitious drop and accompanied by the information that the most recent sample was obtained postdialysis may be reasonable and understandable. Conversely, a set of results showing a major rise may again identify laboratory problems or patient decompensation.

Thus, trend analysis may become a major tool in laboratory work in the future. Much work has yet to be done, to define the generating functions for each test which will allow the comparison to be made and adjudged. However, trend analysis may yield a powerful and useful adjunct and watchdog monitor to the laboratory scene. The constant institutionalization of such algorithms is difficult to accomplish in a manual system and is one area in which the computer-assisted system is clearly advantageous.

Patient reports • In the traditional medical laboratory, the results of tests are communicated back to the ordering physician and/or the appropriate patient's medical record in the form of some type of hardcopy (paper) report. Each laboratory and/or institution has their own format and style of report. Once at the patient's medical record, each institution has developed some method to organize the reports into the patient's medical record.

It is somewhat ironic that some laboratories view their function and product as that of performing the test determinations or excuting the test procedure. In actuality, the laboratory's function and product is the information garnered as a result of executing the test procedure. Thus, the product of a laboratory is the result information contained and transmitted on the patient's report.

One of the major advantages of a computer system is its ability to organize information into a multiple number of different formats, whereas, the traditional laboratory usually has only one such style or report available. Thus, when evaluating laboratory computer systems, one should study its report types and algorithms. Multiple formats should be available and may range from simplistic chronological order to sophisticated flowcharts and graphic representations of functional biological systems.

Communication capabilities • The traditional laboratory and medical record system restricts information to be in one physical location. Thus, another major advantage to a laboratory computer system is that the reports are easily retrievable and multiple copies may be communicated more or less simultaneously to multiple sites. Therefore, a laboratory computer system should be evaluated on its ability to disseminate information to multiple sites and support remote site inquiry to the information. In this aspect attention should be directed to the capabilities of the proposed system participating in a distributed network, and communicating with other computer systems.

Follow-up reports and closed-loop control • Within the setting of a given laboratory, information is occasionally gleaned which good medical practice demands should be followed-up. For instance, an abnormal Papanicolaou (PAP) smear, positive throat cultures, positive blood cultures, etc. should be followed-up to insure that the care team directs the appropriate action. Laboratory computer systems should have the capabilities of organizing and communicating these aspects of care so that the loop is closed and a measure of quality of care is guaranteed within the care process.

Ancillary reports • Each laboratory has a requirement for a variety of reports. Some of these reports are specified by external regulatory agencies, while in other cases, the impetus comes from the institution or the laboratory management. The laboratory computer system should support these functions and remove the burden of report generation from the laboratory personnel.

Ancillary functions • Most laboratories have the need to generate the required billing or accounting data for inclusion in the institutional accounting system. There are numerous other functions which may be advantageous such as an electronic mail system to facilitate intralaboratory communications and assisting in scheduling personnel work plans, vacations, etc.

Conclusions • While there is no simplistic answer to what is the best laboratory computer system, the foregoing should serve as a general guide to choosing

or creating an acceptably functioning system. While it may be controversial in some quarters, laboratories should take an aggresive role in providing a high quality input to the care delivery process. Thus, it should be a goal not to suffer the fate described by Dante in the *Inferno*, that the hottest places in Hell are reserved for those in time of crises who reserve their neutrality.

A good computer system and laboratory should strive for a reversal of what St. Paul describes in his epistle to the *Romans*. Namely, the goal should be that we have done those things which we ought to have done and left undone those things which we ought not to have done.

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The computer as a diagnostic consultant

J. D. Myers, M.D.

Abstract: The last two decades have produced the first efforts toward providing effective computer programs for assistance in medical diagnosis. Fortunately, parallel advances in computer technology, including hardware, have allowed progressively larger and more complex computer programs to be undertaken. One such computer program for diagnostic consultation, CADUCEUS, is described, albeit superficially, and illustrated by a case analysis. As a side benefit, the expert medical knowledge base can serve as a computerized textbook. The impact of computer assisted diagnosis on medical practice is briefly discussed.

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Practicing physicians, particularly in broad fields such as internal medicine, family medicine or pediatrics, are generally aware that the massive increase in medical information during the past three decades has led to the situation in which no physician can retain in his working memory even a major part of this information. Fortunately, most patients have common and fairly simple diseases and the physician's working knowledge base suffices for diagnosis. Illnesses which are very complex or rarely seen by a particular physician may escape diagnosis for unacceptable periods of time, if ever diagnosed, and management of the patient is jeopardized. A crude calculation based on our experience with computer diagnosis indicates that the physician must have over 300,000 bits of information in his working memory to do diagnostic justice when confronted at random with such complex or rare illnesses. Few if any of us have that capacity. The working memory may be supplemented or jogged by reading or consultation but such measures are costly timewise. A method for prompt and efficient knowledge retrieval is needed, and the computer is well suited for this task.

A second factor affecting the accuracy of diagnosis of complex or unusual illnesses is a limitation on hypothesis formulation. The truly capable physician, at any one point of time in the diagnostic process, can consider less than ten diagnostic hypotheses. Again, experience with computer diagnosis in difficult problems shows that there may be dozens of tenable diagnostic hypotheses. The physician can deal with such numbers only by eliminating some from his original list and then bringing into consideration other hypotheses. The problem here is that the correct diagnosis may never be considered or

inadequately so. This leads to the situation which all of us have experienced, namely, "Why in the world didn't I think of that?" Computer programs can bring to attention the total list of tenable hypotheses.

The application of computers to medical diagnosis is a development of the last two decades. The publication which first stimulated this application was that of Ledley and Lusted in 1959.[1] There followed the utilization of Bayes theorem to determine the posterior possibility of a disease or other medical condition being present.[2-4] The Bayesian approach is hampered by the lack of accurate probability data in medicine relating various manifestations of illness to specific diagnoses and by the constraint of the theorem that the various manifestations in a given clinical problem be independent. (Medical phenomena are often interdependent.) As a result, the Bayesian approach has had limited application and in general only to specially selected and quite narrow fields.

During the same time period, other investigators have applied the branching logic technique for the solution of, again, selected and limited clinical problems.[5] Branching logic has the disadvantage of requiring clinical information in a predetermined order. The approach, however, is successful in limited clinical areas where there is a predictable array and order of information.

In part because of the limited application of the above-mentioned computer programs, activity began in the late 1960s in the application of "artificial intelligence" to medical diagnosis. It is not coincidental that at about this same time large mainframe computers were developed with the capability of containing and manipulating the large medical knowledge bases and the complex computer programs which were required.

"Artificial intelligence" is in part a misnomer but is now in common usage to denote the part of computer science devoted to having computers perform tasks which ordinarily require human intelligence. The computer no longer simply manipulates numbers and calculates probabilities as, for example, in Bayesian analysis. Ideas and items of knowledge are represented as symbols and the computer engages in a logical and seemingly intelligent manipulation of these symbols. The programs for such manipulation are composed in one fashion or another to simulate the logical approach of a skilled human in the solution of the given problem. The programs involve many heuristics or "rules of thumb". The accompanying medical knowledge base, in addition to simple lists of items of information, contains much information as to how the various items are to be used and as to how they may be related, incompatible or inconsistent, for example.

The above considerations, in sum, have been the impetus to the development of *Caduceus*, a computerized diagnostic consultant system for the field of internal medicine.[6] The program is currently being expanded into two additional specialties of medicine, pediatrics and neurology. It is estimated that the internal medicine knowledge base, when reasonably complete, will encompass about 800 specific diseases and some 5,000 individual manifestations of disease as well as information on all of the interconnections among diseases. Table 1 illustrates the number of manifestations for a few selected diseases and the number of interrelationships which each disease has with all others in the current, incomplete knowledge base.

Each manifestation of illness which is listed under each specific disease is accompanied by three items of semiquantitative information:

a) Import — the overall importance of the manifestation across all diseases, or "How necessary is it to explain the finding by some disease process?" For example, urine specific gravity greater than 1.020 has a low import since it can occur in well individuals who are a little dehydrated. Proteinuria of greater than 3 grams per day must be explained somehow and carries a high import.
b) Evokes — this item expresses how strongly the manifestation supports the specific disease in formulating a differential diagnosis.
c) Frequency — the semiquantitative expression of the incidence of the manifestation given the specific disease.

Table 1.

Disease	Number Of Manifestations*	Number Of Connections With Other Diseases (Links)
Botulism	107	4
Campylobacter enteritis	99	9
Cryoimmunoglobulinemic syndrome	126	32
Henoch Schonlein purpura	163	4
Hepatocellular carcinoma	149	30
Hyperthyroidism (Graves disease)	144	19
Legionnaires disease	138	22
Renal tuberculosis	110	9
Wegener's granulomatosis	175	22

*Includes historical items, symptoms, signs and laboratory data including radiological and biopsy information.

Taken altogether the knowledge base of *Caduceus* amounts to a readily accessible computerized textbook of internal medicine.

The method of use of *Caduceus* as a diagnostic consultant is illustrated in Figure 1. The patient was reported as a Case Record of the Massachusetts General Hospital.[7] The diagnosis of the rare pulmonary veno-occlusive disease was understandably not made intra vitam as it is very difficult to distinguish from primary or certain secondary forms of pulmonary arterial hypertension. The reader can observe that *Caduceus* promptly recommends that correct diagnosis.

Figure 1.

Enter Case Name:

NEJMV308P823

Initial Positive Manifestations:

Sex Female

Age Gtr Than 55

Syncope or Syncope Recent Hx

Raynauds Phenomenon

EKG Heart Block First Degree

Chest X-ray Lung(s) Parenchymal Calcification

Chest X-ray Ghon Complex

Dyspnea Exertional

Palpitation(s)

EKG Right Axis Deviation

EKG T Wave(s) Inverted

Chest X-ray Upper Lung Field(s) Density (ies)

Heart X-ray Main Pulmonary Artery Enlarged

Lung(s) Compliance Decreased

Chest X-ray Kerley B Line(s)

Lung(s) FEV1 Decreased

Confusion

Skin Telangiectasia

Pressure Venous Cervical Increased on Inspection

Heart Impulse Left Parasternal Systolic Lift

Heart Murmur Systolic Ejection Left Sternal Border

Heart Sound(s) S4 Right Atrial Gallop

Cyanosis Acral Part(s) Only

Proteinuria

Urine Sediment WBC

Urine Sediment Bacteria (Non Acid Fast)

PLatelets 50,000 To 150,000

Glucose Blood Fasting 130 To 300

Uric Acid Blood Increased

Bicarbonate Blood Less Than 20

SGOT 40 To 119

LDH Blood Increased

EKG QRS Prolonged (Without Bundle Branch Block)

EEG Focal Change(s)

Heart Echocardipgraphy Right Ventricle End-diastolic Internal Diameter GTR Than 2.3 Cm

Heart Echocardiography Ventricular Septum Paradoxic Systolic Motion

Heart Echocardiography Pericardial Effusion

Diuretic Administration Recent Hx

Urine Culture Significant E Coli

Urea Nitrogen Blood 30 To 59

Creatinine Blood Increased Up To 2:9 Mg Per Dl

Chest X-ray Interstitial Markings Increased Diffuse

Heart Angiocardiography Right Atrium Enlarged

Heart Angiocardiography Right Ventricle End-diastolic Volume Increased

Oxygen Tension Blood Arterial Less Than 80

Heart Catheterization Pulmonary Artery Pressure Mean 20 To 40

Heart Output Decreased

Chest Pain Substernal At Rest

Initial Negative Findings:

Lung(s) Perfusion Scan Decreased Uptake Localized

Chest X-ray Vascular Marking(s) Decreased Peripheral Diffuse

Pressure Arterial Diastolic 95 To 125

Romberg Sign Positive

Seizure(s) Grand Mal

Seizure(s) Jacksonian

Alcoholism Chronic Hx

Cigarette Smoking Hx

Heart Murmur Hx

Chest Pain Substernal Remote Hx

Orthopnea

Leg(s) Edema Bilateral Slight Or Moderate

Fever

Tachycardia

Tachypnea

Lymph Node(s) Enlarged

Rales Localized

Heart Impulse Apical Lateral Displacement

Heart Sound(s) S2 Splitting Wide And Fixed

Heart Sound(s) S2 Splitting Wide Non Fixed

Heart Sound(s) S3 Right Ventricular Gallop

Finger(s) Sclerodactyly

Hematocrit Blood Less Than 35

Prothrombin Time Increased

Activated Partial Thromboplastin Time Increased

Bilirubin Blood Conjugated Increased

Calcium Blood Increased

Phosphate Blood Increased

Electrophoresis Serum Albumin Decreased

CPK Blood Increased

Alkaline Phosphatase Blood Increased Not Over 2 Times Normal

EKG Sinus Tachycardia

Chest Pain Substernal Exertional

Heart Angiocardiography Tricuspid Regurgitation

Heart Angiocardiography Left Atrium Enlarged

Heart Angiocardiography Left Ventricle Adynamic Area(s)

Carbon Dioxide Tension Blood Arterial Decreased

Carbon Dioxide Tension Blood Arterial Increased

Ph Blood Arterial Less Than 7:3

Ph Blood Arterial Gtr Than 7:5

Heart Catheterization Pulmonary Artery Wedge Pressure Increased

Heart Catheterization Left To Right Shunt At Atrial Level

Heart Catheterization Left To Right Shunt At Ventricular Level

Heart Catheterization Right To Left Shunt At Atrial Level

Heart Catheterization Right To Left Shunt At Ventricular Level

Coronary Arteriography Fixed Luminal Narrowing 70 Percent Or Gtr

Disregarding: Pressure Venous Cervical Increased On Inspection, Bicarbonate Blood Less Than 20, Chest X-ray Lung(s) Parenchymal Calcification, Chest X-ray Upper Lung Field(s) Density (ies), Creatinine Blood Increased Up To 2:9 Mg Per Dl, EKG Heart Block First Degree, Glucose Blood Fasting 130 To 300, Proteinuria, SGOT 40 To 119, Urea Nitrogen Blood 30 To 59, Urine Sediment WBC, EEG Focal Change(s), Heart Echocardiography Pericardial Effusion, Heart Echocardiography Right Ventricle End-diastolic Internal Diameter Gtr Than 2.3 Cm, Urine Culture Significant E Coli, Heart Angiocardiography Right Atrium Enlarged, Heart Angiocardiography Right Ventricle End-diastolic Volume Increased, Heart Output Decreased.

Considering: Age Gtr Than 55, Sex Female, Syncope or Syncope Recent Hx, Chest Pain Substernal At Rest, Dyspnea Exertional, Palpitation(s), Cyanosis Acral Part(s) Only, Heart Impulse Left Parasternal Systolic Lift, Heart Sound(s) S4 Right Atrial Gallop, Raynauds Phenomenon, Chest X-ray Interstitial Markings Increased Diffuse, Chest X-ray Kerley B Line(s), EKG QRS Prolonged (Without Bundle Branch Block), EKG Right Axis Deviation, EKG T Wave(s) Inverted, Heart X-ray Main Pulmonary Artery Enlarged, Heart Echocardiography Ventricular Septum Paradoxic Systolic Motion, Lung(s) FEV1 Decreased, Oxygen Tension Blood Arterial Less Than 80, Platelets 50,000 To 150,000, Heart Catheterization Pulmonary Artery Pressure Mean 20 To 40, Lung(s) Compliance Decreased

Pursuing: Pulmonary Veno-occlusive Disease

Please Enter FIndings of Lung Biopsy

*Omit

Conclude: Pulmonary Veno-occlusive Disease

*The system in the "Pursuing" mode indicates that it has strong evidence for pulmonary veno-occlusive disease. The request for lung biopsy indicates to the user that this is the way to clinch the diagnosis. Biopsy was not done during life so the entry is "Omit". The system concludes that the evidence is good enough for a definite diagnosis without biopsy.

Disregarding: Bicarbonate Blood Less Than 20, Chest X-ray Lung(s) Parenchymal Calcification, Chest X-ray Upper Lung Field(s) Density (ies), Creatinine Blood Increased Up To 2:9 Mg Per Dl, EKG Heart Block First Degree, Glucose Blood Fasting 130 To 300, SGOT 40 To 119, Urea Nitrogen Blood 30 To 59, Urine Sediment WBC, EEG Focal Change(s), Heart Echocardiography Pericardial Effusion, Urine Culture Significant E Coli

Considering: Pressure Venous Cervical Increased On Inspection, Proteinuria, Heart Echocardiography Right Ventricle End-diastolic Internal Diameter Gtr Than 2.3 Cm, Heart Angiocardiography Right Atrium Enlarged, Heart Angiocardiography Right Ventricle End-diastolic Volume Increased, Heart Output Decreased

Pursuing: Cardiac Failure Right Congestive

Please Enter Findings of X-ray Heart and Great Vessel(s)

*Go

Heart X-ray Right Atrium Enlarged?

N/A**

Conclude: Cardiac Failure Right Congestive

**N/A means not available or not done. The published chest x-ray may show modest right atrial enlargement but such is not certain. Again the information is not needed for conclusion.

Caduceus, however, is not available for general clinical use because the medical knowledge base is not yet complete and because we builders recognize certain shortcomings. These are weaknesses in anatomic and temporal analysis, inability to construct differential diagnoses spanning multiple problem areas concomitantly (rather than sequentially as it now does), and inability to explain its "thinking" to the user.

When better developed, computer diagnostic consultant programs should prove useful not only to the physician in regard to complex or unusual diagnoses but useful as well in a triage capacity for physicians assistants, nurse practitioners, medical corpsmen, etc. The system with moderate modification also has application to medical education and testing.

Assuming that computer diagnostic consultant programs are used successfully in the future, there will be a significant effect on what the physician does.[8,9] The burden of carrying in one's memory a large store of facts will be reduced. Time spent in differential diagnosis will be lessened and there will be a reduced need for consultants especially in the broader fields of medicine. The computer will request accurate and explicit clinical information including that from the patient's history and physical examination. Thus the physician's bedside skills will be appropriately reemphasized. The computer will suggest an appropriate diagnostic workup for the patient who presents a diagnostic problem. This should result in the saving of dollars as well as time. As a result of these various factors, the physician will have more time for better and increased doctor-patient interaction in such areas as patient education regarding his illness and in the emotional aspects of disease.

Those of us working in the field of computer diagnostics in medicine are enthusiastic about the work and impatient to bring the task to fruition. We are further encouraged that the costs of computer applications are not increasing with the rest of the economy. The future indeed appears promising.

References

1. Ledley, R.S. and Lusted, L.B.: Reasoning Foundations of Medical Diagnosis, Science 130:9, 19S9.
2. Warner, H.V.; Toronto, A.F.; Veasey, L.G. and Stephenson, R.: A Mathematical Approach to Medical Diagnosis: Application to Congenital Heart Disease, JAMA 177:177, 1961.
3. Gorry, G.A and Barnett, G.O.: Sequential Diagnosis by Computer, JAMA 20S:849, 1968.
4. deDombal, F T.; Leaper, J.R. and Staniland, J.R.; McCann, A.P. and Horrocks, J.C.: Computer-Aided Diagnosis of Abdominal Pain, Brit. Med. J. 2:9-13, 1968.
5. Bleich, H.L.: Computer-Based Consultation: Electrolyte and Acid-Base Disorders, AJM 53:285, 1972.
6. Miller, R.A.; Pople, H.E. and Myers, J.D.: Internist-1, An Experimental Computer-Based Diagnostic Consultant for General Internal Medicine, N. Engl. J. Med. 307: 468-476, 1982.
7. Case Records of the Massachusetts General Hospital (Case 14-1983), N. Engl. J. Med. 308:823-834, 1983.
8. Schwartz, W.B.: Medicine and the Computer: The Promise and Problems of Change, N Engl. J. Med 283:12S7, 1970.
9. Schoolman, H.M. and Bernstein, L.M.: Computer Use in Diagnosis, Prognosis and Therapy, Science 200:926, 1978.

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Nuclear magnetic resonance scans: imaging assisted by the computer

O.F. Agee, M.D.

ABSTRACT: The NMR scanner is the newest major diagnostic device using a computer to direct acquisition of eventual pictorial data reflecting the body's internal structure. Using radio energy to activate nuclei in a magnetic field so they may be positionally "pictured," the technique has several attractions, including superb structural differentiation, the lack of certain CT image degrading artifacts, the ability to produce images in multiple planes, and safety. The most exciting potential is that of (aggregate) molecular spectroscopy of structures pictured, an accomplishment that allows detection of focal biochemical abnormalities before structural damage or change occurs.

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Many diagnostic devices require computer linkages. Scanners do, from the familiar CT[1] to the exotic PET; the newest is an NMR scanner. In most, the computer is a hidden manipulator, seldom surfacing for recognition, its functions almost too complicated to comprehend. With no attempt to explain such here, this discussion, in an issue on computers, resides under false pretenses. Its purpose is to familiarize you with NMR scanning; yet, knowing the computer's basic roles, you will be impressed with its efficiency. Direct computer access is mainly by clinical or maintenance technologists and physicists. Physicians rarely interphase directly, usually only in manipulation of images. The computer directs signal generating events and converts the latter into an image.

To appreciate NMR scanning, some understanding of its development and physical principles is necessary. From personal experience that featured an aversion to mathematical formulas, the author is convinced explanations should err toward oversimplification; with apologies to cognoscente, do not expect rigid exactness. Those interested may explore more comprehensive explanations.[2-5]

History • NMR imaging crept onto the clinical scene in 1980 during an NMR symposium in Nashville jointly sponsored by the Vanderbilt and Bowman Gray Medical School Radiology Departments. Attended by an unprecedented number of research leaders and a few puzzled clinicians, the former without great success, tried to explain NMR. Clinicians were intrigued, but after all, who knew much about magnets or triple Fourier transforms? Physicians sensed potential and experts learned much from one another — and, perhaps, how mainstream medical enthusiasm might astoundingly affect

research funding. Many left feeling that applications might develop after many years, but that NMR was a field to watch.

In 1981 a similar symposium was held at Bowman Gray. Bona fide advances and better communication between speakers and audience completely changed the impact. NMR appeared ready for clinical use and the race for leadership was on. Lonely researchers found themselves surrounded first by a half-dozen assistants, then a score, then a hundred, and millions of dollars were poured into the enterprise. Membership in established or newly formed societies burgeoned and two new journals were born. Skeptics became advocates.

Nuclear magnetic resonance (NMR) was not new in 1980 and many were thoroughly familiar with its principles. By 1946, Bloch[6] and Purcell[7] had developed it for spectral analysis of chemical compounds, an accomplishment meriting the Nobel Prize in 1952. Though an important analytic tool, NMR spectroscopy enjoyed limited clinical appeal; however, workers did develop talent that would later prove pivotal for imaging applications. CT emerged in the '70s, and the marriage of a computer to structure delineating energy for imaging was predictably exciting to visionary workers in NMR. Why not substitute magnetic/RF forces for x-rays? Early investigators remain largely unknown to the medical community though Lauterbur is frequently credited with making NMR imaging a reality.[8] Other practically simultaneous discoveries peaked interest, especially Damadian's contention that images could yield unique information[9] (i.e., the difference between benign and malignant lesions). Pioneers began to design clinical units and by 1980 three university teams in the United Kingdom (Nottingham, London and Aberdeen) were scanning patients; other groups were on the same threshold.

Basis physics, machinery and terms • What is NMR? Prepare yourself for unfamiliar terms and concepts.

On viewing NMR images, many, sensing similarity, will compare them to CT. Such a comparison is useful, but content is different though the two share similar intermediary and final technical avenues. Further, to emphasize the pictorial utility of an NMR image ignores its greater potential.

To most physicians, the appellation "Nuclear" implies radioactivity. This in not so with NMR; the term refers instead to the basic unit whose activities are to be measured — i.e., the nucleus of certain elements. "Magnetic" gives a clue to forces influencing that unit, referring to an imposed artificial environment. "Resonance" is more complicated; for now, consider it a synchronous response of spinning, magnetically influenced nuclei to still another force — radiofrequency (RF). The general descriptive term, NMR imaging, is not universally accepted. With classic exactness, Lauterbur labelled the process zeugmatography,[8] an apt but not very catchy title that seems destined to survive only as an historical precedent. Perhaps most logically, others have suggested magnetic CT. Time will tell.

But back to basics. Some elements' nuclei behave as small bar magnets — hydrogen, phosphorus, and sodium, to mention a few — and are suitable for magnetic resonant techniques. Magnetic properties alone do not guarantee usefulness and there are other influencing factors such as concentration of nuclei, binding forces with adjacent atoms, and physical structure (liquid or solid). The most common satisfactory nucleus is that of hydrogen (a single proton); therefore, proton scans were developed first. With stronger magnets, other potentially more useful elements were soon to be utilized.

If permitted by it environment, each hydrogen nucleus has a tendency toward polar alignment to ambient magnetic fields. Normally, orientation is random since the earth's field strength is so slight. Within a stronger field about 3000 or more times earth's, many protons will realign, If a subject is placed in such an axially directed field, for example, many "proton magnets" will point toward the head. If we temporarily deflect those protons to another axis, perhaps toward the right arm and then terminate the deflecting force, they return to their original, constant, (artificial) field orientation, pointing again toward the head. Such a perturbation is accomplished by applying radio pulses at a frequency dependent upon the element involved and the strength of magnetic force. Having imparted energy to the proton during deflection, as the latter returns to its original orientation, energy is released in the form of a similar RF signal proportional to the number of responding protons, but with no information as to distribution within the sample. The latter is a requirement for image production.

Spatial encoding is begun by prohibiting signals other than from a selected plane within the sample. Such a situation is created by superimposing a weak linearly variable magnetic field on the large magnet's field (the latter uniform within the bore, or sample chamber). The resultant field encompassing the sample is regularly non-uniform in one direction, increasing in strength along a chosen axis. Since the frequency of radiowaves that can result in proton reactivity is proportional to field strength, only protons in precisely one plane perpendicular to the gradient field can respond. Hardware supplying the non-uniform field is called a "gradient" or "bias field" coil. Having radially sampled the plane with RF receiver coils, data is fed to the computer which constructs an (en face) image of the plane representative of proton distribution (or allied variations)

within it. The determination of scan plane is electronic, variable, and not dependent upon mechanical orientation; hence, any plane may be selected within the sample, not simply that allowed by mechanics and anatomy.

Such is easier to describe than to implement. Consider the unique hardware of the system, i.e., those components directly involved in nuclear manipulation. (Later elements in the processing chain similar to those in CT will not be further detailed.)

The key and most expensive element is a powerful magnet with a sampling space within its field. Fabrication of such seems simple, but in fact, is terribly complex and there are few suppliers. Geometry of the magnet (actually, magnets, since several in tandem contribute to the overall field) may vary considerably but the most common resembles a large, cylindrical thick-walled pipe, perhaps 10 feet long and seven feet in outside diameter, with a central bore or sampling chamger of about 50cm diameter along its long axis; cosmetic coverings usually mask the unit's cylindrical shape and the external appearance resembles a "deeper than usual" CT. The patient is placed on a couch in the bore which is a claustrophobia inducing environment not easily accessible to monitoring personnel.

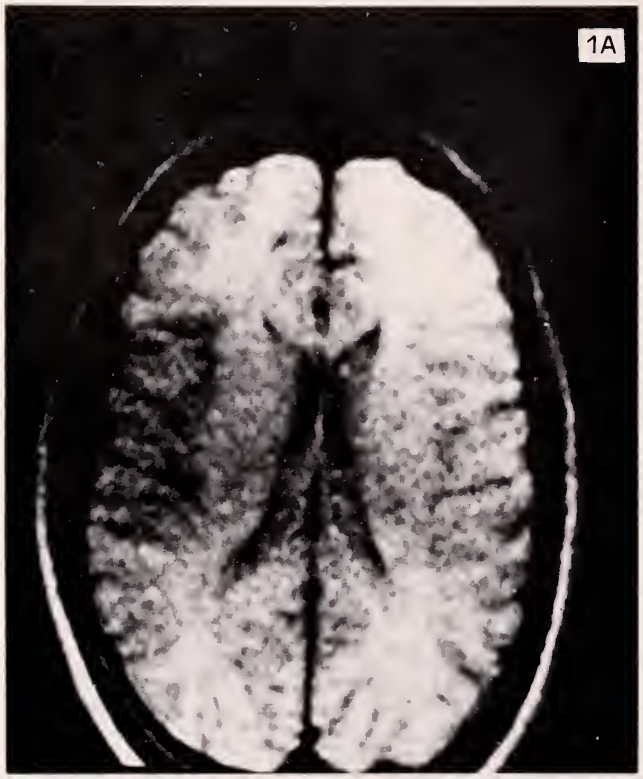
Several types of magnets may be used, differing in the method of magnetic induction, the latter one determinant of field strength. (Field strength requirements are mandated by the element being studied; with less abundant nuclei, high fields, only available with certain designs, are necessary.) Most are electromagnets and may be categorized as either "resistive" or "super-conducting" (supercons). The former is smaller, of simpler design and is easier to maintain, but is limited to a relatively low field strength, about 0.2 tesla (T), (or 2.0 kilogauss, kG). (The far smaller refrigerator door magnet has a strength of about 0.1 T. "Gauss" and "tesla" are unfamiliar units of measurement but are defined in most dictionaries.) Resistive magnets have another disadvantage — electrical consumption; power costs may be several thousand dollars a month. Supercons generate fields many times that of resistors, but are increasingly costly with stonger fields. They generally operate at 1.5-2T, in a range essential for studying nuclei other than hydrogen's. A supercon is very sophisticated, using little electricity because its core windings function at almost absolute zero temperature where certain materials conduct current without resistance. Near-zero temperatures are not easily obtained and windings are first cooled by liquid helium and then by another concentric casing holding liquid nitrogen. Savings in electrical consumption are offset by refrigerant replenishment and labor costs. Electromagnets are heavy, averaging six to seven tons and must be sited in housing allowing such. Yet, they are "light" compared to the most recently developed type, a "permanent" (non-electro) magnet.[10] Weighing around 100 tons, these offer simplicity, require no electrical current or coolant, and have the advantage of more perfectly confining the surrounding magnetic field so as to minimize affectations of surroundings. Low in field strength (0.1-.3T), they appear suitable for hydrogen assay but suite construction demands are formidable. They cannot be "turned off", unlike electromagnets.

Installations may adversely affect their immediate environment because of surrounding magnetic and RF fields. Depending upon siting, elaborate shielding to prevent (mainly) malfunctioning of nearby equipment may be required. Conversely, field homogeneity must be retained — an impossible task if large ferromagnetic objects are in motion nearby — such as elevators, automobiles, etc. Hence, many NMR facilities are separate, isolated buildings. Within the suite, other hazards must be avoided. Wrist watches may be ruined; magnetic tape on the back of credit cards may become illegible; and tools carelessly laid nearby may become lethal missiles when the field is "up".

None is certain of optimal strength or magnet type. Supercons may dominate but most magnets installed within the year will be resistive. Purchasers may await further trials before committing themselves to a particular system.

RF coils produce radiowaves that perturb nuclei at precise frequencies for exact durations. Structurally simple, design may be ingenious; the same coils may be used as receivers for resultant signals. Sequencing of RF pulses is complex and inventive schemes have been designed to derive specific sorts of information. Pending sequence and sectioning mechanics, acquisition times may be long by CT standards — frequently 3-6 minutes / slice with an average study lasting about an hour. The image resembles a CT scan (Fig. 1A-C). Spatial resolution approaches contemporary CT with slice thickness generally greater. It is almost specious to discuss contrast resolution as compared to CT because parameters are so totally different; however, clinically useful resolution may be greater with NMR because tissue differences in the values measured are greater than that with x-ray, essentially the merit of NMR imaging.

Now, let us explore a more puzzling aspect. With CT, there is little variability in the image obtained, the only common alteration being that introduced by contrast agents. An NMR image may reflect several things. Depending upon the RF sequence, images can show nuclear density or two variations of the time required (relaxation time) for nuclei to return to equilibrium positions. Each type image has unique utility, so one tailors the examination to produce images suitable for detection of pathology sus-



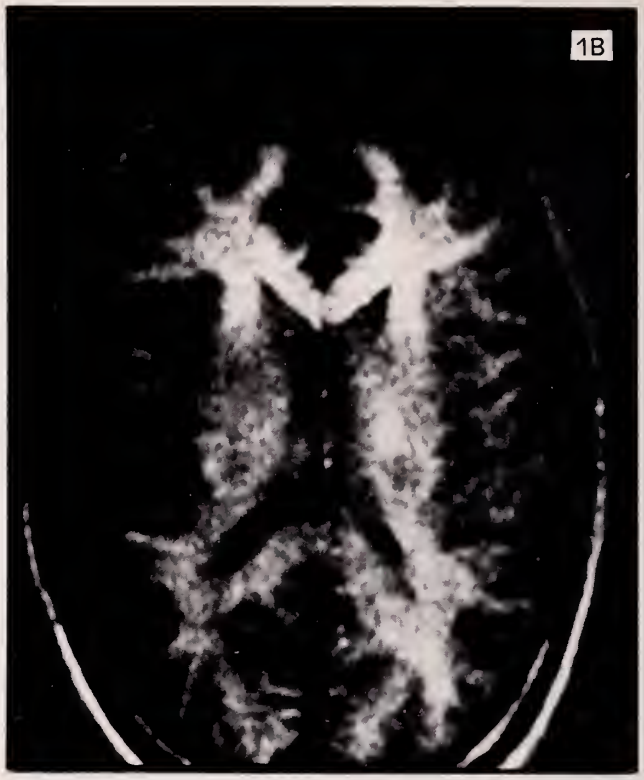
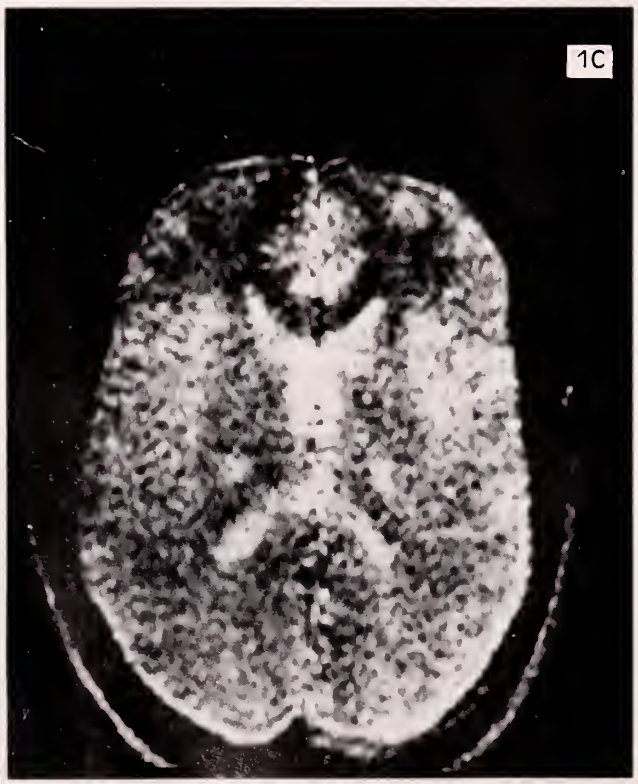


Fig. 1A-C. Axial head scans, all in the same tissue plane, on a normal subject. 1A is a proton density scan, while 1B is mainly T1 and 1C, mainly T2. While 1A and 1B show ventricular fluid as black, this 1C image depicts it as white. In 1B, the only image in which such might be appreciated, grey matter is black and white matter, white.



pected. This cannot be overemphasized; an inopportune choice of RF sequence will completely hide spectacular pathology.

A proton density (PD) image (Fig. 1A) appears bland, without much interstructural separation, because it maps only the relative concentration of hydrogen atoms in structures without much variation of same. Pathology is poorly shown because lesional hydrogen concentration resembles that of normal brain. As with all types of images, a specific pulse sequence is required to generate the PD scan and one may employ repeat free induction decay (RFID) or saturation recovery (SR) techniques. The sequence used may be almost uniquely descriptive of the image that will result. Apprised that an image is RFID indicates it to be a proton density depiction. Thus, one frequently finds illustrations in the literature described by derivation sequence rather than by parameters displayed. For example, a "T1 relaxation time" image as Inversion-Recovery (IR) or a "T2" as Spin-Echo (SE). There is rationale for such, inasmuch as most sequences create an image that is a mixture of several parameters — for example, of T1 and T2 values. One may dominate, but the image is still a melange and additional computation is

necessary to derive "pure" T1 or T2 images. Thus, it is technically incorrect to describe an SE image as a "T2 image", since there are T1 values included. (In practice, one understands an SE sequence to result in a "mainly T2" image.)

T1 and T2 (relaxation time) concepts are hard to explain in a few words. Either is a reflection of the time (in milliseconds) for protons to return to their field equilibrium state following RF perturbation. Nuclei of the same element in different environments, chemically or physically and histologically, will return at different rates and the differences can be pictorially represented. T1 images preceded T2 in clinical use and present a more elegant depiction of anatomy, but may suffer from a lack of sensitivity to pathology; the converse, a more bland depiction but with fewer missed lesions, prevails with T2 images (Fig. 1C). Comparative clinical utility remains to be shown. Even within a single category, i.e., images mainly T2 and generated by a SE technique, there is wide variation and a lesion may be made to appear either white, black, or the same density as background. In the main (except for blood clots), intracranial lesions on T1 images are blacker than normal (abnormally long relaxation time), while on T2, whiter (also long relaxation time). T1 images may also be called spin-lattice or longitudinal relaxation time pictures, while T2 images may also be called spin-spin or transverse relaxation time images, reflections of interactions responsible (with atoms of different types, spin-lattice or with atoms of the same type, spin-spin), or of the directional activity in relaxation, longitudinal or "transverse".

Now that you know the common jargon, let us proceed to applications.

Applications • Consider superiorities of images over CT. Transcendent is that by picturing an NMR parameter one may find better separation between adjacent but different structures than with that resulting from x-ray absorptive differences. For example, there is superb differentiation between grey and white matter of the brain (Fig. 1B). One may perceive various nuclei of the brain. Recently, nuclei of the thalamus were individually identified.[11] Pathology may be shown with NMR that is invisible on CT.

Next, consider Fig. 2. If you sensed something different than that expected on CT, likely you have subliminally realized that bone is not depicted. Though cortical bone contains hydrogen, its protons are so firmly enmeshed in solid matrix that they cannot respond to magnetic or RF influences so as to contribute to the image. Hence, cortical bone appears as a void. While disadvantageous if bone is the focus of interest, such is also a bonus — no bone artifacts are generated to degrade resolution. In regions where nearby bone (or similar structures such as teeth or



Fig. 2. Axial proton density scan through the high posterior fossa in a normal subject. There are no bone artifacts to obscure anatomy and the brain stem is clearly seen. Bone is not depicted, and like Figs. 1A and 1B, the white halo around the head is subcutaneous fat.

fillings therein) affect CT, NMR shows soft tissue with superior delineation. NMR images may have artifacts but not generally as CT.

CT is happiest when making axial sections and in most parts of the body, direct coronal or saggital sectioning is difficult or impossible and reformatting into non-axial planes is not always satisfactory. NMR handles such with ease (Figs. 3 and 4) and allows the ideal view in which to depict a structure, sometimes crucially important.

Additionally, by showing a lesion differently from CT, valuable complementary data may be gained in some cases. For example, a subacute extracerebral hematoma may be hard to detect by CT



Fig. 3. "T1" coronal head section on a normal subject. There are no bone or tooth artifacts.



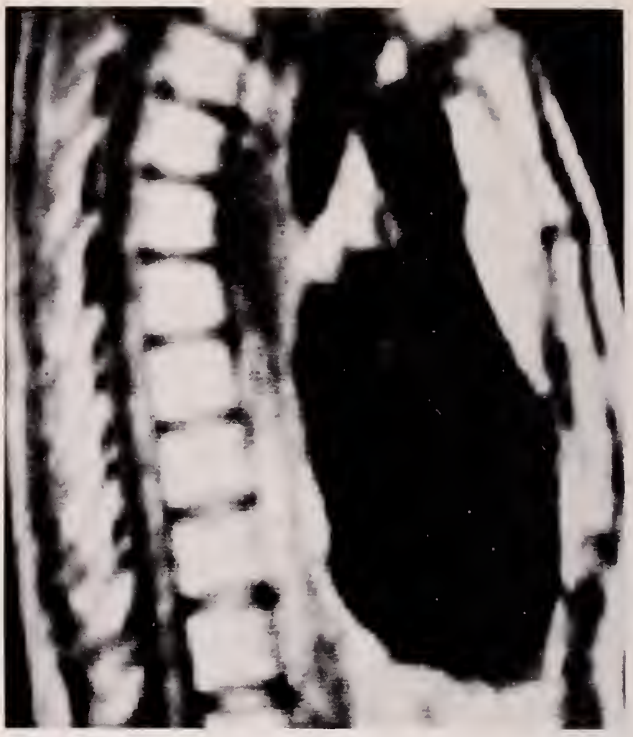


Fig. 4A-B. Mid-saggital proton density sections in normal subjects (faced toward the reader's right). 4A shows exquisite delineation of the brain stem and upper cervical cord. 4B shows the lower cord; a cord enlarging tumor would be easily recognized. Although the cortices of vertebral bodies are not seen, their centra (marrow) are, along with the nucleus portion of their intervertebral discs. Note the heart chambers and the aortic arch further anteriorly (black).

because of lesional x-ray absorption identical to adjacent tissue. Early evidence suggests easy NMR detection at the same stage.[12] Similar applications will surface.

There is potential for contrast materials in NMR, though not with conventional media.[13] Several substances have "paramagnetic" qualities which can change the magnetic properties of tissue. Oxygen can change the tissue appearance, as shown by a different appearance of blood in the well oxygenated left side of the heart as compared to the right side following "contrast" loading[14] (accomplished by the subject breathing oxygen briefly, prior to scanning).



Fig. 5. Gated axial proton density section through the heart of a normal subject. Blood within the chambers is flowing too fast to generate a signal and is black, thus making it distinguishable from the surrounding myocardium. Frequently, papillary muscles and valvular structures may be seen. The humeri (arrows) appear as a centrally white "target," since the marrow (white) generates a strong signal, but the cortex (black ring), none.

This brings us to another potential. Consider rapidly flowing blood and its NMR depiction. Stagnating within the imaging plane during the time of image production, it would be shown. But what if it flows too rapidly through the plane to be either magnetized and/or detected? Generally, such will prevail and prevent image production; hence, rapidly flowing fluid will appear as a void like bone but for different reasons. Benefits and disadvantages accrue but the former dominate. Blood shows no signal and is black, the effect that of a noncontrast angiogram (Fig. 5) that can delineate the intimal surfaces of heart chambers or blood vessels.[15] Further, if flow slows enough, protons remain in the sample plane long enough to transmit a signal that quantitated might characterize flow rate.[16] Implications are great.

Yet CT does well in demonstrating anatomy and pathology, and in some instances (where thin sections are desirable, cortical bone detail is important, etc.) may excel NMR. So why the excitement about "another variety" of CT?

There are two main reasons. The first is based on greater extractable, non-pictorial data with NMR. In early NMR work before scanning, spectroscopy,

dependent on "chemical shift" phenomena was widely used for chemcial analysis. Investigators have already shown that in vivo spectroscopy is feasible, though with a surface coil technique, not a true scanner.[17] It is hoped similar data may be extracted from scans with targeted molecular analysis a reality. Too formidable an enterprise with hydrogen nuclei, phosphorus spectroscopy (in energy transfer compounds) shows promise for assessing the vitality of tissues. Biochemical changes may be detectable before structural damage occurs so that we may see "pre-lesional" abnormality. Here is the challenge and the promise. In this mode, NMR generates data resembling that from a positron emission tomographic (PET) scanner. Lacking the versatility of PET, NMR will likely have more direct clinical impact because of formidable requirements for exploiting PET, in spite of its research value.

The second transcendent attribute is safety. With no ionizing radiation, NMR is thought harmless.[18] Advantages are obvious, particularly to high risk groups requiring many repeat studies. Certain patients can be harmed by NMR and must be scrupulously excluded from the scan area. Pacemakers are adversely affected. Some surgically implanted devices are of metals influenced by magnetic forces[19] and if at a site where dislodgment might be crucial, patients with such devices must avoid the NMR site. (One might "unclip" an intracranial aneurysm, for example.) Elaborate schemes for screening individuals for such devices are necessary.

Bear in mind that NMR imaging is in its infancy and to expect spectacular success immediately is unrealistic and will only cause counterproductive disillusionment. Further, even in maturity it does not promise to be a diagnostic panacea. Finally, in this developmental phase, much in-house basic science expertise is necessary for proper exploitation.

Present happenings and attitudes • In mid-1983 there were about a half-dozen NMR scanners in the United States and about that many elsewhere. Florida had none. By mid-1984, there are likely to be another forty scanners in the U.S., five to ten likely within our State. At the University of Florida, the first became operational in August, 1983. As of late August, 1983, Florida's Department of HRS had received 17 CON applications. Demand will depend upon the uniqueness of its disclosures balanced against the expenditures necessary. Technique standardization/simplification and software improvements may be important secondary considerations.

Units are expensive. The cost is generally more than CT (approximately $1.5 million) not including substantial remodeling/construction or operating costs. Patient throughput is approximately that of CT, with similar revenue once insurance firms acknowledge the modality beyond the experimental stage. They have not yet done so. The real question remains, "Will NMR prove so important to the care of patients that it can be justified?"

In the next few years intense research activity to establish such importance will be seen. Early work will perhaps concentrate on "pure imaging" potential. Later maturing effort will address spectroscopy, fluid dynamics (blood flow) and "contrast agents". If economic predictions prove reliable, professional consumers may largely wait for consolidation of early data before committing themselves to purchase — perhaps in the late 1980's.[20, 21]

In any case, we shall witness an exciting era in which the computer enables us to approach the facile data collection of science fiction.

ACKNOWLEDGEMENT

This manuscript was written before the University of Florida's NMR unit had begun to produce images, and illustrations had to come from other sources. Several research teams, including that at Hammersmith Hospital in London using a PICKER unit and that in Eindhoven, The Netherlands, using a PHILIPS unit, kindly offered material, and to them I am grateful. Images actually used* were provided by research teams associated with the TECHNICARE Corporation in Cleveland, inasmuch as their pictures best match those expected from our first unit, manufactured by the same firm. My sincere thanks to them.

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References

Available upon request.

● Dr. Agee, Department of Radiology, University of Florida, College of Medicine, Gainesville 32610.

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In vitro studies demonstrate

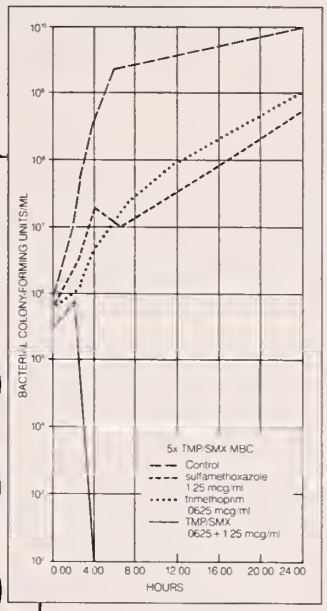
Bactericidal activity with minimal resistance

Percent of isolates of common uropathogens sensitive to BACTRIM and to other antimicrobials

	Escherichia coli	*Klebsiella pneumoniae*	*Proteus mirabilis*	*Proteus vulgaris*	*Proteus sp.*	*Enterobacter sp.*	*Enterobacter aerogenes*	*Enterobacter cloacae*
BACTRIM	96% (328,598)	89% (63,551)	93% (62,691)	84% (4174)	91% (4381)	88% (1736)	96% (7326)	92% (11,856)
ampicillin	72% (345,209)	5% (65,466)	85% (67,338)	16% (4381)	70% (4402)	10% (1775)	9% (7759)	11% (12,091)
cephalexin†	81% (343,339)	85% (67,031)	92% (67,027)	16% (4398)	80% (4365)	22% (1834)	13% (7571)	12% (11,846)
nitrofurantoin	97% (307,785)	65% (61,162)	7% (59,775)	13% (3848)	14% (3059)	67% (1707)	60% (7109)	67% (10,830)

†Analogous to cephalothin, the primary antibiotic disc used in testing.
Source: The Bacteriologic Report, BAC-DATA Medical Information Systems, Inc., Winter Series, 1981-82.
Numbers under percentages refer to the projected number of isolates tested.

RAPID *IN VITRO* DESTRUCTION OF *E. COLI**



Kill curve kinetics of Bactrim and its individual components against *E. coli in vitro*.[1]

The bactericidal action of Bactrim has been demonstrated *in vitro* on laboratory strains of *E. coli*[1,2] and on clinical isolates of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis* and *Morganella morganii*[3]—the most common causative organisms of urinary tract infections.[4] More than 100 published studies attest to the efficacy of Bactrim in recurrent urinary tract infections due to these organisms.[5] In comparative studies with other antimicrobials, Bactrim has consistently demonstrated unsurpassed efficacy during therapy.[6-11]

Resistance to Bactrim develops more slowly than to either of its components alone *in vitro*.* Among urinary tract isolates, resistance has rarely emerged in susceptible strains.[5,12] Bactrim is contraindicated in pregnancy at term, during lactation, in infants less than two months old and in documented megaloblastic anemia due to folate deficiency.

Initial episodes of uncomplicated urinary infections should be treated with a single-agent antimicrobial.

Bactrim™ DS

(trimethoprim and sulfamethoxazole/Roche)

b.i.d. *for recurrent urinary tract infections*

**In vitro* data do not necessarily predict clinical results.

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See next page for references and a summary of product information.

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kramer MJ, Mauriz YR, Robertson TL, Timmes MD: Morphological studies on the effect of subinhibitory and inhibitory doses of sulfamethoxazole-trimethoprim combination on *Escherichia coli*. Presented at the 12th International Congress of Chemotherapy, Florence, Italy, Jul 19-24, 1981. **3.** Spicehandler J *et al: Rev Infect Dis* 4:562-565, Mar-Apr 1982. **4.** Stamey TA: *Pathogenesis and Treatment of Urinary Tract Infections*. Baltimore, Williams & Wilkins, 1980, p. 13. **5.** Ronald AR: *Clin Ther* 3:176-189, Mar 1980. **6.** Cooper J, Brumfitt W, Hamilton-Miller JMT: *J Antimicrob Chemother* 6:231-239, 1980. **7.** Gower PE, Tasker PRW: *Br Med J* 1:684-686, Mar 20, 1976. **8.** Cosgrove MD, Morrow JW: *J Urol* 111:670-672, May 1974. **9.** Iravani A *et al: Antimicrob Agents Chemother* 19:598-604, Apr 1981. **10.** Schaefler AJ, Flynn S, Jones J: *J Urol* 125:825-827, Jun 1981. **11.** Rous SN: *J Urol* 125:228-229, Feb 1981. **12.** BAC-DATA Medical Information Systems, Inc., Bactenologic Reports, Winter Series, 1976-82.

Bactrim™ DS

(trimethoprim and sulfamethoxazole/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note.* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, hepatocellular necrosis, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients. *Pregnancy:* Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, hepatocellular necrosis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: *Not recommended for infants less than two months of age.*

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment. Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100 and 500; Tel-E-Dose* packages of 100; Prescription Paks of 20. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose* packages of 100; Prescription Paks of 40. *Pediatric Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per tea spoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

References:
1. Stone PH, Turi ZG, Muller JE: Efficacy of nifedipine therapy for refractory angina pectoris. *Am Heart J* 104:672-681, September 1982.
2. Antman E, Muller J, Goldberg S, et al: Nifedipine therapy for coronary-artery spasm: Experience in 127 patients. *N Engl J Med* 302:1269-1273, June 5, 1980.

BRIEF SUMMARY

PROCARDIA* (nifedipine) **CAPSULES** For Oral Use

INDICATIONS AND USAGE: I. Vasospastic Angina: PRDCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PRDCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PRDCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PRDCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PRDCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PRDCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PRDCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and or increased fluid volume requirements have been reported in patients receiving PRDCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PRDCARDIA and a beta blocker, but the possibility that it may occur with PRDCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out. In PRDCARDIA treated patients where surgery using high dose fentanyl anesthesia is contemplated, the physician should be aware of these potential problems and, if the patient's condition permits, sufficient time (at least 36 hours) should be allowed for PRDCARDIA to be washed out of the body prior to surgery.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PRDCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PRDCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PRDCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PRDCARDIA.

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PRDCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: General: Hypotension: Because PRDCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PRDCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug Interactions: Beta-adrenergic blocking agents (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PRDCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PRDCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PRDCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers. The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PRDCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients; transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PRDCARDIA or concomitant antianginal medication. Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills and sexual difficulties. Very rarely, introduction of PRDCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PRDCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PRDCARDIA therapy, has been reported twice in the extensive world literature.

HOW SUPPLIED: Each orange, soft gelatin PRDCARDIA CAPSULE contains 10 mg of nifedipine. PRDCARDIA CAPSULES are supplied in bottles of 100 (NDC 0069-2600-66), 300 (NDC 0069-2600-72), and unit dose (10x10) (NDC 0069-2600-41). The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

More detailed professional information available on request

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"I can do things that I couldn't do for 3 yrs. including joining the human race again."



Quotes from an unsolicited letter received by Pfizer from an angina patient.
While this patient's experience is representative of many unsolicited comments received, not all patients will respond to Procardia nor will they all respond to the same degree.

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"My daily routine consisted of sitting in my chair trying to stay alive."

"My doctor switched me to PROCARDIA[*] *as soon as it became available. The change in my condition is remarkable."*

"I shop, cook and can plant flowers again."

"I have been able to do volunteer work...and feel needed and useful once again."

PROCARDIA can mean the return to a more normal life for your patients—having fewer anginal attacks,[1] taking fewer nitroglycerin tablets,[2] doing more, and being more productive once again.

Side effects are usually mild (most frequently reported are dizziness or lightheadedness, peripheral edema, nausea, weakness, headache and flushing, each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%).



for the varied faces of angina

* Procardia is indicated for the management of:
1) Confirmed vasospastic angina.
2) Angina where the clinical presentation suggests a possible vasospastic component.
3) Chronic stable angina without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or nitrates or who cannot tolerate these agents. In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks' duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in these patients are incomplete.

PROCARDIA®
(NIFEDIPINE) *Capsules 10 mg*

Please see PROCARDIA *brief summary on adjoining page.*

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J-9043-4 July 1981

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Heart Answers



WHAT IS HYPERTENSION?

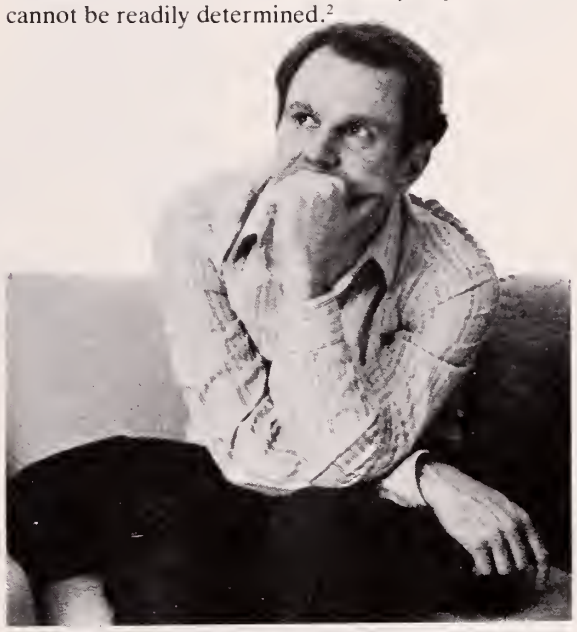
Hypertension is the medical term for high blood pressure. It occurs when the pressure the heart needs to pump blood is higher than normal. People who have untreated hypertension are more likely to suffer from heart disease and stroke. High blood pressure can be detected with regular blood pressure checks. The risk of heart disease and stroke can be reduced with treatment to control high blood pressure. Contact your local American Heart Association for more information.

American Heart Association

WE'RE FIGHTING FOR YOUR LIFE

Candidates for nutritional therapy...

5,000,000 hospital patients with infections.[1] Many are anorectic and may have a markedly reduced food intake. Supplements are often provided as a prudent measure because the vitamin status of critically ill patients cannot be readily determined.[2]



Berocca Plus. A balanced formula for prophylactic or therapeutic nutritional supplementation. Berocca Plus Tablets provide: therapeutic levels of ascorbic acid and B-complex vitamins; supplemental levels of biotin, vitamins A and E, and five important minerals (iron, chromium, manganese, copper and zinc); plus magnesium. Berocca Plus is not intended for the treatment of specific vitamin and/or mineral deficiencies.

...candidates for

Rx ONLY **Berocca® Plus** TABLETS

THE MULTIVITAMIN/MINERAL FORMULATION

1. Dixon RE: *Ann Intern Med* 89(Part 2):749-753, Nov 1978. 2. Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME; Philadelphia, Lea & Febiger, 1980, p. 1114

Please see summary of product information on reverse page.

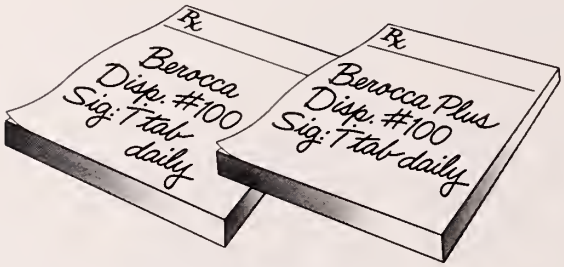
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Rx ONLY **Berocca® Plus** TABLETS

THE MULTIVITAMIN/MINERAL FORMULATION

also available as Rx ONLY **Berocca®** TABLETS



Before prescribing, please consult complete product information, a summary of which follows:

Each Berocca® tablet contains: 500 mg vitamin C (ascorbic acid), 15 mg vitamin B_1 (as thiamine mononitrate), 15 mg vitamin B_2 (riboflavin), 100 mg niacin (as niacinamide), 4 mg vitamin B_6 (as pyridoxine HCl), 18 mg pantothenic acid (as calcium *d*-pantothenate), 0.5 mg folic acid, 5 mcg vitamin B_{12} (cyanocobalamin).

Each Berocca® Plus tablet contains: 5000 IU vitamin A (as vitamin A acetate), 30 IU vitamin E (as *dl*-alpha-tocopheryl acetate), 500 mg vitamin C (ascorbic acid), 20 mg vitamin B_1 (as thiamine mononitrate), 20 mg vitamin B_2 (riboflavin), 100 mg niacin (as niacinamide), 25 mg vitamin B_6 (as pyridoxine HCl), 0.15 mg biotin, 25 mg pantothenic acid (as calcium pantothenate), 0.8 mg folic acid, 50 mcg vitamin B_{12} (cyanocobalamin), 27 mg iron (as ferrous fumarate), 0.1 mg chromium (as chromium nitrate), 50 mg magnesium (as magnesium oxide), 5 mg manganese (as manganese dioxide), 3 mg copper (as cupric oxide), 22.5 mg zinc (as zinc oxide).

INDICATIONS: Berocca—Supportive nutritional supplementation in which water-soluble vitamins are required prophylactically or therapeutically, including conditions causing depletion, or reduced absorption or bioavailability of water-soluble vitamins, conditions resulting in increased needs for water-soluble vitamins. Berocca Plus—Prophylactic or therapeutic nutritional supplementation in physiologically stressful conditions, including conditions causing depletion, or reduced absorption or bioavailability of essential vitamins and minerals, certain conditions resulting from severe B-vitamin or ascorbic acid deficiency, or conditions resulting in increased needs for essential vitamins and minerals.

CONTRAINDICATIONS: Hypersensitivity to any component.

WARNINGS: Not for pernicious anemia or other megaloblastic anemias where vitamin B_{12} is deficient. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with vitamin B_{12} deficiency who receive supplemental folic acid and who are inadequately treated with B_{12}.

PRECAUTIONS: *General:* Certain conditions may require additional nutritional supplementation. During pregnancy, vitamin D and calcium supplementation may be required with Berocca Plus or supplementation with fat-soluble vitamins and minerals may be required with Berocca. Not intended for treatment of severe specific deficiencies. *Information for the Patient:* Toxic reactions have been reported with injudicious use of certain vitamins and minerals. Urge patients to follow specific dosage instructions. Keep out of reach of children. *Drug and Treatment Interactions:* As little as 5 mg pyridoxine daily can decrease efficacy of levodopa in treatment of parkinsonism. Not recommended for patients undergoing such therapy.

ADVERSE REACTIONS: Have been reported with specific vitamins and minerals, but generally at levels substantially higher than those in Berocca and Berocca Plus. Allergic and idiosyncratic reactions are possible at lower levels. Iron, even at recommended levels, has been associated with GI intolerance in some patients.

DOSAGE AND ADMINISTRATION: Usual adult dosage: one tablet daily. Available on prescription only. (Berocca Plus is not recommended for children.)

HOW SUPPLIED: Berocca—Light green, capsule-shaped tablets—bottles of 100 and 500. Berocca Plus—Golden yellow, capsule-shaped tablets—bottles of 100.

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And what is more reassuring to an excessively anxious patient than medication that promptly starts to relieve his discomforting symptoms? Valium® (diazepam/Roche) begins working within 30 to 90 minutes. Patients continue to improve in just a few days, and relief continues throughout the course of treatment.

There are other important benefits with Valium as well—along with its broad clinical range, Valium has an efficacy/safety profile that few, if any, drugs can match. This record has been achieved with extensive clinical experience, undoubtedly including yours. And, as you must have observed, side effects more serious than drowsiness, fatigue or ataxia rarely occur. Nevertheless, as with any CNS-acting agent, patients should be cautioned about driving, operating hazardous machinery or ingesting alcohol or other CNS-depressant drugs while taking Valium.

Yet another benefit Valium affords is flexibility. Available in 2-mg, 5-mg and 10-mg scored tablets, Valium enables you to titrate dosage to individual patient needs. For the geriatric patient, a starting dosage of 2 to 2½ mg once or twice a day is recommended. And, for patients who forget or skip medication, you can prescribe Valrelease™ (diazepam/Roche) 15-mg slow-release capsules, knowing that Valrelease will assure all the benefits of Valium 5 mg *t.i.d.* with the convenience of once-a-day dosage.

Discontinuation of Valium (or Valrelease) is typically as smooth as its start in short-term therapy. However, Valium and Valrelease should be discontinued gradually after more extended treatment. As you diminish dosage, the built-in tapering action of Valium and Valrelease will help avoid rapidly recurring anxiety symptoms and symptoms of withdrawal, and will help ease the patient's transition to independent coping when therapeutic goals have been achieved.

...that's one of the unique benefits of

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diazepam/Roche

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For a summary of product information, please turn the page.

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Valium® (diazepam/Roche) Ⓝ Tablets
Valrelease™ (diazepam/Roche) Ⓝ slow-release Capsules
Injectable Valium® (diazepam/Roche) Ⓝ

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, impending or acute delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in: relief of skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome. *Oral forms* may be used adjunctively in convulsive disorders, but not as sole therapy. *Injectable form* may also be used adjunctively in: status epilepticus; severe recurrent seizures; tetanus; anxiety, tension or acute stress reactions prior to endoscopic/surgical procedures; cardioversion.

The effectiveness of diazepam in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindications: Tablets or capsules in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

> ***Usage in Pregnancy*: Use of minor tranquilizers during first trimester should almost always be avoided because their use is rarely a matter of urgency and because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

ORAL Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral forms adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

INJECTABLE *To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling and, rarely, vascular impairment when used I.V.: inject slowly; taking at least one minute for each 5 mg (1 ml) given, do not use small veins, i.e., dorsum of hand or wrist, use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Injectable Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.*

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest; concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea; have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence; can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of diazepam, *i.e.*, phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed and tolerated)

The clearance of diazepam and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

INJECTABLE. Although promptly controlled, seizures may return; readminister if necessary; not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures; use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated.

Adverse Reactions: Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported: should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, observed in patients during and after diazepam therapy are of no known significance.

INJECTABLE Venous thrombosis/phlebitis at injecuon site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia. In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

Dosage: Individualize for maximum beneficial effect.

ORAL *Adults.* Anxiety disorders, relief of symptoms of anxiety—Valium (diazepam/Roche) tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 Valrelease capsules (15 to 30 mg) daily. Acute alcohol withdrawal—tablets, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; or 2 capsules (30 mg) the first 24 hours, then 1 capsule (15 mg) daily as needed. Adjunctively in skeletal muscle spasm—tablets, 2 to 10 mg t.i.d. or q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily. Adjunctively in convulsive disorders—tablets, 2 to 10 mg b.i.d. to q.i.d.; or 1 or 2 capsules (15 to 30 mg) once daily.

Geriatric or debilitated patients. Tablets—2 to 2½ mg 1 or 2 times daily initially, increasing as needed and tolerated (see Precautions). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose.

Children: Tablets—1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use in children under 6 months). Capsules—1 capsule (15 mg) daily when 5 mg oral Valium has been determined as the optimal daily dose (not for use in children under 6 months)

INJECTABLE Usual initial dose in older children and adults is 2 to 20 mg I.M. or I.V., depending on indication and severity. Larger doses may be required in some conditions (tetanus). In acute conditions injection may be repeated within 1 hour, although interval of 3 to 4 hours is usually satisfactory. Lower doses (usually 2 to 5 mg) with slow dosage increase for elderly or debilitated patients and when sedative drugs are added. (See Warnings and Adverse Reactions.)

For dosages in infants and children see below; have resuscitative facilities available.

I.M. use: by deep injection into the muscle.

I.V. use: inject slowly, take at least one minute for each 5 mg (1 ml) given. Do not use small veins, i.e., dorsum of hand or wrist. Use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.

Moderate anxiety disorders and symptoms of anxiety, 2 to 5 mg I.M. or I.V., and severe anxiety disorders and symptoms of anxiety, 5 to 10 mg I.M. or I.V., repeat in 3 to 4 hours if necessary; acute alcohol withdrawal, 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary. Muscle spasm, in adults, 5 to 10 mg I.M. or I.V. initially, then 5 to 10 mg in 3 to 4 hours if necessary (tetanus may require larger doses); in children *administer I.V. slowly*; for tetanus in infants over 30 days of age, 1 to 2 mg I.M. or I.V., repeat every 3 to 4 hours if necessary; in children 5 years or older, 5 to 10 mg repeated every 3 to 4 hours as needed. Respiratory assistance should be available.

Status epilepticus, severe recurrent convulsive seizures (I.V. route preferred), 5 to 10 mg adult dose administered slowly, repeat at 10- to 15-minute intervals up to 30 mg maximum. Repeat in 2 to 4 hours if necessary, keeping in mind possibility of residual active metabolites. Use caution in presence of chronic lung disease or unstable cardiovascular status. Infants (over 30 days) and children (under 5 years), 0.2 to 0.5 mg slowly every 2 to 5 min., up to 5 mg (I.V. preferred). Children 5 years plus, 1 mg every 2 to 5 min., up to 10 mg (slow I.V. preferred); repeat in 2 to 4 hours if needed. EEG monitoring may be helpful.

In endoscopic procedures, titrate I.V. dosage to desired sedative response, generally 10 mg or less but up to 20 mg (if narcotics are omitted) immediately prior to procedure; if I.V. cannot be used, 5 to 10 mg I.M. approximately 30 minutes prior to procedure. As preoperative medication, 10 mg I.M., in cardioversion, 5 to 15 mg I.V. within 5 to 10 minutes prior to procedure. Once acute symptomatology has been properly controlled with injectable form, patient may be placed on oral form if further treatment is required.

Management of Overdosage: Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure, employ general supportive measures, I.V. fluids, adequate airway. Use levarterenol or metaraminol for hypotension. Dialysis is of limited value.

How Supplied:

ORAL Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100 and 500; Prescription Paks of 50, available in trays of 10; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25 and in boxes containing 10 strips of 10.

Valrelease (diazepam/Roche) slow-release capsules—15 mg (yellow and blue), bottles of 100; Prescription Paks of 30.

INJECTABLE Ampuls, 2 ml, boxes of 10; Vials, 10 ml, boxes of 1; Tel-E-Ject® (disposable syringes), 2 ml, boxes of 10. Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buffers, and 1.5% benzyl alcohol as preservative.

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SPECIAL ARTICLE

The AMA/GTE Medical Information Network

Steven E. Fisher

Approximately two years ago, the American Medical Association signed an agreement with GTE Telenet Communications Corporation to develop and implement a communications and information service dedicated to the medical profession. This article briefly summarizes relevant background information on the evolution and development of the AMA/GTE Medical Information Network (MINET), and describes current and anticipated Network products and services.

Background • During the last decade, the rate of growth in medical technology and science has outstripped any one person's ability to assimilate the accumulating knowledge in its entirety. One obvious solution, to bring the power of the computer directly to the physician, has traditionally been infeasible: computer access for individuals has been too expensive. Recent advances in technology, however, have for the most part, resolved problems associated with computer access: the development of packet switching telecommunications networks permits many individuals to utilize, at low cost, computer resources situated in distant areas.

The Author
STEVEN E. FISHER
Mr. Fisher is Director of Research and Development of the American Medical Association.

One of the largest and most extensive telecommunications networks currently available in the U.S. is operated by GTE Telenet. AMA's agreement with GTE therefore brings into focus the strengths of both organizations: AMA is well-known as a major provider of medical information; GTE has the capability to disseminate the information on-line, at low cost, using the most up-to-date communications technology.

One of the largest and most extensive telecommunications networks currently available in the U.S. is operated by GTE Telenet.

Current Product Offerings • MINET consists of two major components:

- AMA/NET℠: a series of medical data bases licensed to GTE by the American Medical Association; and
- MED/MAIL℠: an "electronic mail" service to facilitate communications between Network subscribers.

At present, AMA/NET is composed of six (6) services:

- The Drug Information Base contains evaluative, up-to-date unbiased information on the clinical use of drugs. More than 1200 individual preparations marketed under some 5000 trade names in the U.S., Canada and Mexico are described in detail.
- The Disease Information Base contains succinct descriptions of diseases, disorders and conditions. The important diagnostic features of more

than 3500 identifiable diseases are summarized in a systematic manner, using preferred standard terminology.

• The Medical Procedure Coding and Nomenclature Information Base provides a uniform coding and nomenclature system for reporting medical services and procedures provided by physicians.

• The Excerpta Medica Physicians Information Retrieval and Education Service (EMPIRES) is a compilation of references to articles recently published in over 300 well-known medical journals and periodicals. In most cases, citations are accompanied by abstracts, to assist the user in determining if the full text of an article would be of interest. Coverage is from June 1981 through the present.

• The Socio/Economic Bibliographic Information Base serves as a guide for locating current articles on the non-clinical aspects of health care. More than 700 publications, including journals, reports, books and newspapers, are monitored on a continuing basis, making this the most comprehensive bibliographic resource of its kind.

• Massachusetts General Hospital Patient Simulation modules enable MINET subscribers to test their clinical skills through simulated encounters with patients. Most of these interactive programs are approved for Category I continuing medical education (CME) credit towards the AMA Physician's Recognition Award.

Via Med/Mail subscribers can read, send and file messages electronically; once a message is sent, it is immediately deposited into the recipient's "mailbox," where it can be read at his or her convenience 24 hours a day, every day. Using this service, for example, subscribers can contact AMA's Library to order the full text of important articles referenced in citations contained on the AMA/NET Socio/Economic Bibliographic and EMPIRES Information Bases. MED/MAIL also serves as a source of information on scheduled continuing medical education activities, AMA meetings and the like, via electronic "bulletin boards."

Areas of Information Development • Due to their wide variations in functions and specializations, different health care professionals require access to many different types of information and products. Accordingly, the Medical Information Network will evolve to provide additional services, including drug therapy and reaction information, disease-related laboratory test values, therapy and related services, and educational services for both physicians and patients. This wide range of services will insure that some aspects the medical information network will be of use to all participating health care professionals.

The Medical Information Network was developed to provide physicians and other health care professionals with accurate, up-to-date information via a computer based telecommunications network.

Summary and Conclusion • The Medical Information Network was developed to provide physicians and other health care professionals with accurate, up-to-date information via a computer based telecommunications network. The current product offering represents the first step in a phased development effort which will span several years. Already, however, the Network is evolving into an indispensable tool for health care professionals: usage of the MINET service will help to improve both the quality and the cost-effectiveness of health care.

● Mr. Fisher, American Medical Association, 535 North Dearborn St., Chicago, IL 60610.

The evolution in health care financing

Richard J. Feinstein, M.D.

For the first 150 years of our nations history, physicians exchanged care for cash or bartered goods and services. Most physicians treated all the sick people who presented themselves for care and collected from those who were willing and able to pay. Hospitals were relatively unimportant for most people and they were generally looked upon as places of last resort, feared and alien.

During the 1930's, health insurance companies like Blue Cross were started to indemnify people against the financial losses that could be incurred from illness or injury. Labor unions were gaining power and prestige and they utilized health insurance as a tax free wage benefit for their members. Employers and the commercial health insurance carriers built in safeguards to prevent abuses of health insurance benefits. These safeguards obligated beneficiaries to be responsible for the first $50 or $100 each year and a percentage of the rest of the costs, usually 20%. This deductible and copayment were included to make people think before utilizing their gnsurance for frivolous problems.

It is not easy to determine if workers' demands for health insurance and health care caused the rapid rise in health costs, or if rising costs fostered the increased demands among workers for high quality health insurance protection. Both are probably true and health costs began to rise rapidly in the 1950's as more Americans demanded and received health insurance protection.

The Author
RICHARD J. FEINSTEIN, N.D.
Dr. Feinstein practices Dermatology in Miami.

A giant step in health care financing was taken in 1965 when Congress passed legislation creating Medicare and Medicaid. Medicare was formulated as an entitlement program to provide some health insurance protection for eligible retired workers aged 65 or older and a select group of disabled persons. Medicaid, to be administered through the states with a portion of state funding, was to provide quality private health care to those living at the poverty level. States had the option to participate or reject Medicaid.

The creation and utilization of health insurance, private commercial or government entitlement, heralded the onset of a phase of health care financing in the United States where much of the responsibility for health costs was shifted from the patient through the employer, to the commerical insurance carrier, the so-called third party. This represented a great philosophic break with the past when patients were held directly responsible for costs incurred by the health care provider, physician or hospital.

As health care costs began to rise rapidly in the 1960's and 1970's, dissatisfaction began to develop with the existing system. Employers, especially large corporations like General Motors and Eastern Airlines, were disturbed by the rising cost of insuring their employees, but the costs remained tax deductible expenses that could be passed on to consumers through higher product costs. Health insurance companies were able to increase their premiums to compensate for unpredicted short-falls caused by rapidly rising utilization and costs. Patients continued to have little direct liability, and unfettered access to health care. Deductibles and copayment obligations remained relatively small. Health care providers in the meanwhile, doctors and

hospitals, flourished and prospered in the milieu where payment responsibility had been shifted from patient to a distant and anonymous third party.

The situation has progressively worsened for participants in the health care payment exchange. Employers, especially at times of economic slow down, have been faced with staggering health insurance costs that have been rising erratically from 20% to 40% per year, when they were unable to pass those costs on. The commercial insurance carriers were being left with large and hard to predict short falls, amounting to $750 million in 1982. They have been forced to raise premiums from 20% to more than 50% per year to businesses and individuals who were unable and unwilling to pay the costs. Some carriers tried to retain subscribers by reducing benefits and quality. Lastly, the patients have been forced to pay larger deductibles, often $300 to $500 per person per year, and increasingly larger amounts as the copayment.

Eisenberg and Williams[1] reporting in *The New England Journal of Medicine* believe that the cost of health care has risen because of an increase in both the price and utilization of health services. Price has risen because of numerous factors, like general inflation, rising hospital wages, and because hospitals and physicians now provide a different product than was previously available, offering sophisticated technology, new classes of drugs, and new members of the health care team. The utilization of services has also increased dramatically because of an increasing percentage of older people in our society who require more medical care than younger ones, and because the poor and elderly now have better access to care through Medicare and Medicaid.

Gibson and Mueller have suggested that 52% of the recent increase in health care costs can be attributed to inflation and the other 48% to increased utilization.

Gibson and Mueller have suggested that 52% of the recent increase in health care costs can be attributed to inflation and the other 48% to increased utilization. Indeed, Eisenberg points out, some of the increased utilization of medical services may reflect the cost of services that are not medically necessary. These have been attributed to patient expectation, the increased number of physicians, and the excessive number of hospital beds.

Dr. Arthur Silk,[2] writing in the same journal, asks whether blaming physicians for the health cost inflation is analagous to blaming an airline pilot for the cost of jet fuel. It must be pointed out, however, that between 50% and 80% of all health costs are controlled by the physician, although doctors actually receive about 15% of the health care dollar, down from 20% a decade ago. Physicians are generally unaware of the costs of health services that they order on a daily basis as the patient's representative in the health care market place.

A study performed at Miami's Jackson Memorial Hospital found that only 2% of house staff doctors knew more than 50% of the correct costs of their patient's services.

A study performed at the Medical College of Ohio showed that house staff physicians know only 30% of the costs of laboratory and x-ray services that they order for patients. Faculty physicians knew only 45%. A study performed at Miami's Jackson Memorial Hospital found that only 2% of house staff doctors knew more than 50% of the correct costs of their patient's services. In another study where 40 community doctors were polled, only 14% of costs were estimated correctly.

It must be strongly emphasized at this point that this data in no way demonstrates any malice or devious intent by physicians. More than 90% of medical doctors are both competent and honest and act in good faith to provide their patients with the best medical care possible. This data merely shows that a system of health care financing which is fed by the indifference of patients who have no direct responsibility for the costs they incur has not encouraged health providers to be concerned with costs. We are the richest nation on earth; one that spends $21 billion on cigarettes each year, $30 billion on alcoholic beverages, and about $80 billion on coccaine. Our main motivation has been to demand and have provided the best health care without regard to cost, and our physicians have been educated to follow that dictum.

There have been numerous proposals to restrain the rising cost of health care. Some proposals have attempted to limit the number of hospital beds or control the number of expensive technicological services. The now defunct Health Systems Agency, HSA, attempted to utilize this approach. Other approaches have attempted to modify physicians' behavior in an attempt to reduce costs while maintaining high quality. The Professional Standards Review Organizations, PSRO's, created by Public Law 92-603 in 1972, attempted to modify physicians' behavior through education and peer review. The South Florida PSRO, now called the Medical Foundation of South Florida, can provide ample evidence to demonstrate that their process of peer review of hospital use has both educated doctors to

be more conscious of costs, while at the same time they reduced overall government costs for beneficiaries in excess of their annual cost of operation.

State and county medical societies once carried out peer review as well to educate and chastise physician members whose fees were in excess of the usual and customary, but the Federal Trade Commission brought suit against these groups for conspiring to fix prices. It seemed odd that the federal government who sought to reduce health costs was preventing physician groups from regulating high fees under the threat of anti-trust legislation.

It seemed odd that the federal government who sought to reduce health costs was preventing physician groups from regulating high fees under the threat of anti-trust legislation.

The annual cost of health care continues to climb past $1,000 per year for each person in the U.S., and to consume an increasingly larger percentage of the Gross National Product (GNP). Health care used about 5% of the GNP in the 1950's, while the current figure has pushed past 10%. Physicians are now being educated to be more cost conscious by medical journals, curricular changes in medical schools, and through peer review programs like PSRO, but the benefits of these efforts are perceived as coming too slowly and other plans are being made to alter the methods by which health care is to be financed.

One method involves the use of Diagnosis Related Groups, DRG's, which were implemented for federally subsidized patients in Maryland and New Jersey two years ago. Starting in October 1983 all U.S. hospitals with Medicare patients will receive prospective payment based upon the patient's admission diagnosis. This is a marked contrast from the present method in which hospitals receive retrospective payment based upon their actual costs plus an extra payment for profit. Inefficient hospitals, which keep patients longer and utilize more of their services in a haphazard manner, are actually reimbursed more per diagnosis than efficient hospitals which discharge patients efficiently and quickly.

Under the new DRG system, if a hospital fails to provide service to its patients within the payment limits set by Medicare for the admitting diagnosis, it will lose money, and the Health Care Financing Administration expects many inefficient hospitals to fail. Few, if any hospitals ever failed during the cost plus system of reimbursement.

Other changes will also be implemented. All employers will be required to offer alternative forms of health insurance to their employees. Businesses with 25 or more employees must already offer an HMO, Health Maintenance Organization, to their employees as an alternative to the traditional indemnity type of insurance. HMO's provide total health care for the fixed monthly premium, but they force beneficiaries to visit only HMO doctors. Americans have traditionally been very adamant about maintaining freedom of choice in health care and other matters, whenever possible, but as their obligations for payment of deductibles and copayment gets higher, they will become more willing to accept health plans that limit their freedom of choice.

For employees who do not want to subscribe to an HMO offered by an employer, two alternatives will be available: first, the traditional health insurance with its total freedom of choice to visit whichever health care provider is desired, but containing provisions for increasingly larger out of pocket expenses, and second, a newly created concept, the Preferred Provider Organization (PPO). Both the PPO and the HMO represent managed health care delivery systems with the HMO offering maximum savings and minimum freedom when compared to the others.

Both the PPO and the HMO represent managed health care delivery systems with the HMO offering maximum savings and minimum freedom when compared to the others.

A PPO is an entity formed by a group of physicians and a hospital who agree to be efficient and offer health care at a discount to groups of employees or clients of commercial insurance carriers. The greatest benefit of the PPO is provided to the employee who is free to choose any physician on the PPO list without having to pay any out of pocket expenses. Employers benefit by acquiring some control over present and future costs through the concept of shared data and control of the system with the PPO's administrators, who are the physicians and the hospital providing care. Some commercial insurers, like Prudential and Metropolitan Life, have begun to develop their own network of PPO's, in addition to the HMO's and the traditional indemnity insurance which they have been involved with for years.

Congress is also likely to pass some aspects of the Pro-Competitive Health Care strategy, as proposed by Rep. Gephardt (D. Mo). A ceiling will most

likely be set on the amount of money an employer can deduct for health insurance premiums. It is believed that this figure will be set at $75 per employee per month, and expenditures over this amount will be taxable to both the employee as income, and the employer as a nondeductible expense. This tactic will force employers and employees to seek out less expensive alternatives.

It is also likely that Medicare will undergo drastic changes during the next few years. The Medicare fund is nearly depleted, and Congress must either raise taxes or begin to limit or alter benefits. Medicare may soon be taken away from the elderly rich; those with an annual income over $25,000, or these people may be required to pay extremely large premiums. HCFA, Medicare's financial intermediary, no longer wishes to pay out claims for fee for service medical care, and they seem interested in going to a voucher system. Under this system each Medicare beneficiary will receive a voucher, representing a fixed amount of money per month, and it will be up to each person to use that voucher to choose whatever health insurance plan they determine is best for themselves. It will be vitally important for Medicare to properly educate these elderly people so that they do not squander these vouchers on worthless plans, or become the victims of fraudulent health insurance hucksters.

The federal government has amply demonstrated its inability to solve many of the problems facing the people of our nation, and we must all; doctors, hospitals, and citizens, avoid the awful possibility of the government's further intrusion into the health care arena. Total socialization of medicine, as in Great Britain and Sweden, would utterly destroy a system that functions in general, at a very high level of efficiency. Through education of consumers and providers, quality health care can continue to be provided and in a more efficient manner than ever before.

● Dr. Feinstein, 3661 South Miami Avenue, Miami 33133.

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(Page 1)

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NOTES & NEWS

Medical Solution System™ endorsed by Florida Medical Association available

Twelve years ago a Florida physician, feeling that the business operations of a doctor's office should be computerized, set out to create a system that would bring together patient information, insurance processing, billing and practice procedures into an efficient, time saving method. Today his ideas are being used in the Medical Solution System™, a product of Florida Medical Systems, Inc. of Clearwater.

Recognizing the implications of a computer system uniquely designed for medical practices, leaders of the Florida Medical Foundation sought the assistance of Data Communications Corporation of Memphis, Tennessee in 1980 to create a sophisticated system from the work that had already been done by H. Phillip Hampton, M.D., of Tampa, in his efforts to develop the concept. Developmental research for this system included interviews with Florida physicians and state medical specialty groups to examine and document their business functions and needs in medical practice.

The criteria compiled for the system was based upon this research in controlling health care practice management. It was decided the system should: utilize reliable hardware; be easy to operate; be flexible in order to customize to individual needs; be able to have communications with the outside world and in doing so be especially compatable with most insurance companies' computers; and it should be available at a reasonable cost.

With the criteria set, actual building of the system began. The software was completely rewritten but the concept developed by Dr. Hampton remained the same. The result is a flexible in-office computer system which automates practice management, endorsed by the Florida Medical Association. The Medical Solution System™ has also received a product endorsement from the Mutual Association for Professional Services (MAPS).

The Medical Solution System™ is based on a powerful Data General Corporation Computer. Data General currently ranks as one of the leading computer companies in the world with over 100,000 systems installed. Service is provided by factory trained Data General representatives.

The systems are designed to fit the needs of single or multi-partner practices with room for growth considered. The system is now compatible with the revolutionary Data General Desktop Computer System, making its use possible for one and two physician practices at a moderate cost.

Use of the system allows time for professional care by automating time consuming office activities. Administrative duties such as patient scheduling, business reports, claims processing, billing and paperwork are all handled by the Medical Solution System ™, freeing the physician and his staff for the delivery of care.

For example, on the system patient information may be displayed in seconds to resolve inquires. Patient data is only entered once and as patient identification and encounter information is entered, the computer updates the patient record, prepares insurance claims and generates statements either by demand or normal cycle billing. Redundant shuffling of paper and retyping data is eliminated. Clerical time is reduced with fewer paperwork errors.

The system also simplifies scheduling by maintaining a physician's log of activities and time slots available. And as new appointments are made, a personalized notice is prepared as a subsequent reminder to the patient to help avoid missed appointments.

Improving cash flow management is another of the advantages of this system. It automatically produces universally accepted insurance claims including AMA, HCFA and Champus approved forms. This accurate and speedy preparation helps accelerate cash flow both directly and through third party payments. Accounts Receivable are also processed with a minimum of effort and offer a variety of flexible reporting methods. Other features include word processing, a flexible cash post system, immediate generation of practice and financial summaries and comparative analyses of diagnoses and procedures with revenue reporting.

The Medical Solution System™ is also capable of providing access to the GTE Telenet Medical Information Network (MINET) which transmits clinical and socioeconomic information for physicians as a service of the American Medical Association.

The system was also designed with security in mind. Data is safe and secure with only those authorized to use it with a password entry. It is also easy to use and neither the physician nor his staff need to have computer experience to use it. Convenient fill in the blank formats with simple English commands enable the operator to begin using the system within hours. Training is provided with installation of the system.

Seven Medical Solution Systems™ are already in use in Florida and two are being installed. One of the operators, Mrs. Pam Anderson of Tampa, said that the difference it has made in a three-man ophthalmology office is "like night and day". The sofware and hardware are excellent, she said, and the service provided for changes, amendments and problems has been prompt and reliable.

The Florida Medical Foundation is overseeing continuous software support and research and development as the requirement for the continued endorsement of the Medical Solution System™ by the FMA. This in itself assures the stability and quality of the system and its marketing company for the benefit of the physicians for whom it was developed. For more information about the system contact Florida Medical Systems, Inc., 405 South Duncan Avenue, Suite B, Clearwater, Florida 33515 or phone toll free 1-800-282-8300 (locally 813-461-4486).

Dr. Thames elected to National Family Practice Board of Directors

T. Byron Thames, M.D., of Orlando, recently was elected to a three-year term on the Board of Directors of the American Academy of Family Physicians (AAFP). The AAFP is the nation's largest medical specialty organization representing more than 55,000 family doctors.

A graduate of the Duke University School of Medicine, Dr. Thames is in private family practice in Orlando. He also is chief medical consultant to a number of organizations, including Walt Disney World, Sea World, Coca-Cola Foods Division and Martin Marietta Corporation.

Dr. Thames is a member of the Academy's Commission on Legislation and Governmental Affairs and the Ad Hoc Task Force on Reimbursement. He has served as a member and chairman of the AAFP State Officer's Conference Committee.

On the state level, Dr. Thames served as president of the Florida Academy of Family Physicians in 1976-1977. He is a past president of the Florida Medical Association (1980-1981), the Orange County Medical Society (1970) and the Florida Industrial Medical Association (1970).

Dr. Thames was elected to his new position at the annual meeting of the AAFP's Congress of Delegates October 8-10 in Miami Beach. The Congress — the Academy's governing body — consists of representatives from each of the 54 AAFP constituent chapters. The Congress preceded the Annual AAFP Scientific Assembly held October 10-13 in Miami Beach.

Dr. Thames was a delegate from the Florida Academy to the AAFP Congress of Delegates for six years.

Headquartered in Kansas City, Missouri, the AAFP was a pioneer in continuing medical education (CME). It was instrumental in establishing the medical specialty of family practice in 1969. The Academy requires its members to complete a minimum of 150 hours of approved CME credit every three years.

New program will teach transfusion medicine to physicians

The University of Miami School of Medicine and South Florida Blood Service today announced a five-year program to improve the teaching of transfusion medicine to medical students, physicians in training and practicing physicians.

"This will put South Florida at the forefront of teaching transfusion medicine," said Dr. Bruce A. Lenes, associate medical director of the Blood Service.

Dr. Lenes was chosen to coordinate the new program by the National Heart, Lung and Blood Institute, one of the branches of the federal government's National Institute of Health. The institute has provided a $50,000 grant during the first year, and the grant is renewable for another four years.

Only five grants were awarded in the nation. The others were to universities in Seattle, Albuquerque, San Francisco and Chicago.

"This program is significant for the future development of transfusion medicine as a discipline," said Dr. Azorides Morales, chairman of the university's pathology department. The department will administer the grant on behalf of the university.

"While all medical students learn about blood and transfusion, the field has advanced so rapidly that it is becoming a specialized discipline. This program will train physicians in the very latest facts and techniques of transfusion medicine." he said.

Under the terms of the grant, Dr. Lenes will spend half of his time at the university and half at the Blood Service.

The objective of better physician training is better patient care, Dr. Lenes said. "The benefits will extend not only to patients in our own area hospitals, but also to those throughout the nation," he added.

"South Florida Blood Service is committed not only to providing the safest blood components for patients, but also to helping medical professionals use that blood in the best and most efficient manner," he said. "Our role is education, research and service to the community, not merely providing blood to patients."

The Blood Service is a nonprofit community organization that accepts voluntary donations of blood from people in Broward, Dade and Monroe counties. It supplies that blood to 59 hospitals and dialysis centers in the three counties.

Utilization of Short Stay Hospitals: 1981 Annual Summary released

The average length of stay of the 38.5 million Americans hospitalized last year (excluding newborn infants) was 7.2 days, according to the report, "Utilization of Short Stay Hospitals: United States 1981 Annual Summary," published by the National Center for Health Statistics. There were 169 patients discharged and 1,218 days of care per 1,000 persons in the United States.

The report is based on data obtained through the National Hospital Discharge Survey, which obtains statistics by sampling inpatient medical records from 550 hospitals (approximately 227,000 medical records face-sheets for the 1981 survey). These hospitals have been voluntarily participating in the program since 1965.

Data are presented for characteristics of patients (age, sex, race), hospital characteristics (region, size, type), conditions diagnosed, and surgical and nonsurgical procedures performed.

Largest difference between white, black, and other races was that the percent of visits of white patients over 65 was about twice that of blacks and other races. Black persons' length of stay averaged 7.5 days, followed by 7.2 for white patients and 6.1 for other races.

Discharge from short stay hospitals by geographic region ranged from 6.4 million in the West Region to 13.2 in the South Region. The average length of stay for patients discharged from short-stay hospitals in 1981 increased steadily from 5.9 days in the 6-99 bed hospitals to 8.1 days in the hospitals over 500 beds. Average length of stay for both sexes was about the same after maternity visits were excluded. The average length of stay increased with the age of the patient regardless of hospital size.

Hospitals with 300 beds or more treated an estimated 48 percent of patients, but performed about 55 percent of operations.

Diseases of the circulatory system were the principal, or first listed, diagnoses among patients discharged, accounting for an estimated 17.4 million discharges. Next was diseases of the digestive system, with 8.9 million diagnoses.

Operations on the digestive system ranked highest of all listed procedures performed on patients in 1981, except in the largest hospitals, where the most common were diagnostic and therapeutic procedures, followed by digestive system operations. Next most common procedure in all hosptials, regardless of size, were operations on the female genital organs.

National Center for Health Statistics, "Utilization of Short-Stay Hospitals: United States, 1981 Annual Summary," VITAL AND HEALTH STATISTICS, Series 13, No. 72, DHHS Pub. No. (PHS) 83-1733, 64 pp. Public Health Service, Hyattsville, MD 20782. Copies of this report may be obtained by writing the Superintendent of Documents, U.S. Government GPO Stock Number — 017-022-00826-2 Price: $3.75

DEAN'S MESSAGE

An experiment in the study of human values in Medicine

Medicine in its best sense has always been a liberal study, concerned with the whole human being, and the physician has traditionally been a liberally educated individual. When a community faced a crisis it turned to the doctor as a representative of learning as well as of science. A knowledge of man, not just of technology, made it possible for the physician to care well for his patients at a time when little was known by current standards. Physicians were men of letters, of politics, of humanity as well as of science. Yet the rapid growth of the latter threatens our educated status. So much must be known of the techniques of diagnosis and treatment as well as the cellular and molecular foundations of disease mechanisms that we are in danger of losing our knowledge and understanding of the human beings we care for. We have become highly trained specialists at the expense of our own higher education.

When I became Dean of the University of South Florida College of Medicine I hoped to emphasize the intellectual dimension of medical education. I wanted

our students and faculty to be part of a University ("the abridgement of the universe") as well as of a Medical Center. I wanted to make a major effort to assure that our graduates embody the traditional ideal of liberally educated professionals, worthy of respect as leaders not just as skilled technicians. As part of that effort I have established in September 1981 the Division for the Study of Human Values in Medicine, headed by the former Associate Dean of Social and Behavioral Sciences at Ohio State University, and later the Dean of the College of Arts and Letters at the University of South Florida, Professor David H. Smith. Two years later that Division is making a difference at our University.

The faculty of the Division consists entirely of people with appointments in other departments who share its aims and want to work together. Fifteen departments are represented including seven from USF liberal arts colleges. Thus, the Division is fostering interdisciplinary cooperation of the most vital kind, and the Human Values Journal Club serves as a vehicle for that cooperation. Each month the Club discusses important value issues and has succeeded in increasing faculty awareness of these questions. With the help of the Human Values Division our Department of Internal Medicine has increased instruction on communication between physicians and patients, a subject that is now included in the freshman course on physician diagnosis. We also have increased our direct teaching about human value issues. Our Medicine and Society course for sophomore students is now supplemented by a unit in the freshman year on value elements in public health policy. Family medicine with the help of the Division spends one half day each week in the fourth year elective on the value issues the students confront in their patient contact. The emphasis is on the meaning of illness in the lives of patients and their families as well as on the ethical issues faced by all. We also offer a series of fourth year electives in Human Values. These include: History of Medicine, Medical Ethics, Medicine and Social Problems, Communication in Clinical Medicine, Writing and Speaking Skills for Physicians.

The Division has offered special instruction for faculty in improving lecturing skills, developed an interviewing instructional videotape now being used at a number of other universities, fostered independent study in medicine and literature by medical students, brought discussion of value issues to a group of interested physicians in private practice, assisted medical students interested in extracurricular opportunities to learn about values, and work with residents and interns on communication and value problems they encounter in their hospital experiences, and established publication of the Human Values Report. This publication informs us about the related activities of students and faculty, includes faculty comments on ethical cases and articles on the history of medicine.

In a recent letter to Professor Smith, one of the leaders of the Society for Health and Human Values told us that our range of activities now exceeds those of many long established programs. We are proud of our progress and are determined to continue it. This is the one hundredth anniversary of the birth of the great physician-poet William Carlos Williams. His life reminds us of the breadth of education and concern for humanity that have characterized many of our great physicians. We covet that combination for our future colleagues.

Thus, our experiment indicates so far that the study of human values in medicine provides a scholarly crossroads where Medical Center faculty and Liberal Arts faculty can meet for intellectual exchange and common inquiry. The demonstrated interest of our medical faculty in these larger value issues is a source of pride for me. The truly great medical school we are determined to become will be one where the human vision guides the application of technology for the benefit of humankind.

Andor Szentivanyi, M.D., Dean
University of South Florida
College of Medicine
Tampa

WORTH REPEATING

Another look at second surgical opinions.

Just when it appears that everything possible has been said about second surgical opinion programs there comes another push to mandate them for certain segments of the population.

I have no objection to the intelligent use of second opinions as to the necessity and appropriateness of an operation. In fact, I so abhor the thought of willful performance of unnecessary or inappropriate surgery that I can support their use either prospectively or retrospectively through peer review. The question in dispute is whether or not there is such widespread "unnecessary surgery," whether such programs will reduce it significantly, and whether the cost control motive is a sensible reason for imposing these programs.

Several studies have been conducted in an attempt to determine rationally if they are beneficial. A Massachusetts Medicaid study was reported in

1980 in the *NEJM*.[1] Second opinions were mandated for a selected group of operations. Of 2060 patients, 10.5% had such obvious indications that no second opinion was necessary, and 12.3% who obtained appointments for a second opinion failed to keep them. Of the remaining 1591 patients, 88.7% had a confirming second opinion. Of the nonconfirming, 11.3% (180) patients, 82 obtained third opinions and 57 of these agreed with the first. The net result was that in only 7.7% of the instances in the study, the first opinion was unconfirmed by the second or third opinions.

A voluntary program was sponsored by BC/BS of New York. This experience from 1976-1981 was reported in the Bulletin of the American College of Surgeons[2] in April 1981. 8000 subscribers obtained second opinions but it was found that one-third of the patients who inquired about them did not get them. 70% of the second opinions confirmed the original recommendation with the nonconfirming opinion ranging from modification to rejection.

This study found that most of the patients followed the consultant's advice but that one-third of those who received a confirming second opinion still did not obtain the operation. The conclusions were that a nonconfirming second opinion does not necessarily indicate that the first opinion was in error, and second opinion programs may actually increase the number of elective operations.

Rutkow and Zuidema published an in-depth study of this subject in 1978.[3] They noted that the ACS report of SOSSUS defined those operations most likely to be unnecessary as:

1. Operations in which no pathological tissue is removed.
2. Operations in which indications are a matter of judgment.
3. Operations to relieve endurable or tolerable symptoms.
4. Discretionary operations for non-pathological, asymptomatic, or non-threatening conditions.
5. Operations which are outdated, obsolete, or discredited.
6. Operations with little justification by clinical, laboratory, or X-ray studies.

They point out that the consultant really has limited options. He or she can agree that the surgery is needed, that the original diagnosis is incorrect, or that additional non-operative treatment is needed. I might further add that a consultant might differ as to the specific operative procedure recommended. All things considered, the conclusion was reached that possible benefits of second opinion programs would lie in their "sentinal effect," increasing awareness of the importance of adequate surgical training, and causing third party payers to take a closer look at "comfort surgery."

As I have stated, I will support almost any means to eliminate unnecessary surgery and those surgeons who are willfully guilty. However, I am distressed that I detect only one theme coming from those who are the loudest proponents of these programs. That theme is that you can't trust a doctor, a la Nader. That is a far more ominous problem than unnecessary surgery.

(1) Gertman, P.M., et al., *NEJM* (211 5/22/80.
(2) Sieverts, I., *Bull. of the Amer. Coll. of Surg.* 66:4 Apr. 1981
(3) Rutkow, I.M. and Zuidema, G.D., *Surgery*, November 1978

James K. Conn, M.D.

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Consultations

"Why did you send that other doctor in here without telling me?" the patient said with considerable irritation. "You mean, Dr. X," I said. "I told you he would be coming by to check you." "No, not him, I mean the other one."

My patient was irate, and I was caught in the middle of a major communication blackout resulting from a consultant's failure to observe reasonable medical etiquette.

I was treating Mrs. Jones for a recurring problem, and she was not responding. After a few days, I submitted a consult to an old friend, asking for help in her management. The next day she was seen by his associate, who did a good evaluation and ordered some changes in her treatment. The orders bothered me a little, as he made no effort to clear them with me, but they were minor, so I told myself to stop being picky and let them stand. He suggested that we sould consider further tests and an additional consult. I made a mental note to discuss this with him the next morning.

However, on rounds the next day, I was greeted with the barrage in the opening paragraph. I soon found that Dr. X had ordered his own consult and several tests. I had not been notified, nor had my patient! When Dr. X's consultant began telling my patient about the tests he wanted, she told him she would have nothing more done unless her doctor assured her it was needed.

At no time did either doctor suggest anything inappropriate. Yet I was left with an angry patient with whom I had previously had good rapport for seven years. The problem could have been avoided with a little forethought and common sense.

Doctors use consultants for different reasons:

1. Some ask for someone to assure them they are doing everything right.
2. Some ask help in areas in which they have no personal expertise.
3. Some ask help to find a piece to a puzzle which seems to elude them.

My consultant ignored these needs, and acted as though I were no longer on the case.

Consultation etiquette mandates communication. Dr. X should have called me after seeing my patient. Then we could have discussed the best approach, drawing on his special knowledge and my years of experience in dealing with my patient. Failing that, I would have liked him to have the nurse clear any orders with me. I could then have prepared the patient for what was to come, and everyone would have been happy. To make matters worse, my consultant did not tell the patient what he was planning. Even had I not known, telling the patient would have prevented the situation.

Consultants need to remind themselves that a consult is a request for help and information. It should attempt to solve problems, and it should teach. It is not a license to take over a case. In fact, an attending physician requesting a consult has the right to NOT follow the suggestions if he feels his patient would not benefit from them. (He should, however, have very good reasons, discuss them with the consultant, and document them in the chart.)

I would like to suggest several ways to prevent such occurrences and make the consultation process more effective:

For the Attending Physician:

1. Decide why you need a consult and what specific things you wish to get from the consultation process.
2. Tell this to the consultant, both in writing and orally.
3. Continue to "attend" to your patient.
4. Talk to your consultant often.
5. If you disagree with a recommendation, discuss it with the consultant. Put your reasons in writing if you decide not to go along.
6. If you feel the consultant should be handling the case, sign the patient over to him.

For the Consultant:

1. Answer consults promptly, or phone to discuss.
2. Always remember you are consulting by invitation. You are not the attending.
3. Discuss with the attending the actual role you are to play in terms of writing orders, testing, and conveying information to the patient. Unless you have been asked specifically to write orders, at least ask that all orders you write be cleared with the attending.
4. Talk to the attending often. The patient should be getting the same signals from both of you.
5. Do not refer the case to another doctor without first clearing it with the attending physician.
6. If you have fulfilled all of the expectations of the patient and attending, consider whether you should sign off the case, and discuss this with the attending.

Of all the factors leading to malpractice suits, failure to communicate is undoubtedly the greatest. Anytime the patient must deal with more than one physician, the risks escalate. Observance of a few simple courtesies can help to prevent you from getting caught in a health care triangle whether you are an attending physician or a consultant.

J. E. Perchalski, M.D.

Reprinted with permission from *The Bulletin* of Hillsborough County Medical Association, September 1983.

CORRESPONDENCE

Dear Editor: I found some glaring defects in the reasoning expounded by Kendall Beckman Jr. in his article, "Another Medical Dodo Bird."

First: It is absurd for a physician to spend valuable time making telephone calls. He can ask his secretary to place a call to a colleague, as long as he/she is close by to respond when the physician he is calling comes on the line.

Second: He mentions requesting a consultation only to have the physician requested relate through a nurse that he is too busy to respond. Dr. Beckman can eliminate this problem by personally telephoning the consultant physician, to discuss the case, and to ask for the consultation. No physician will decline a consultation that is requested personally by a colleague, but some may decline a consultation request that is extended through a hospital nurse or unit clerk.

Third: Most physicians, including myself, receive a large number of telephone calls each day. It is quite discourteous to a patient to have a physician leave the room for multiple interrupting telephone calls. Sometimes a physician must decide that he must attend to his patient and return a routine call from a colleague at a more convenient time.

Richard J. Feinstein, M.D.
Miami

Dear Editor: Please allow me to congratulate you and the editorial staff of JFMA on your editorial "In honor of William M. Straight, M.D." in the most recent August issue.

The contributions of Bill Straight to the JFMA and to the entire medical community of Florida during the past 18 years have been enormous. He has added to our daily enjoyment of life and practice through his historical efforts, and, as you point out, has created the only annual historical issue of any state journal. These are singular accomplishments.

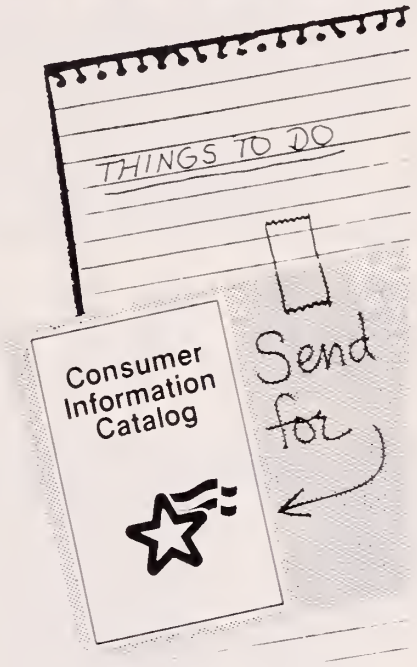
He has bettered our life in the past, and we look forward to his fascinating August issues in the future.

James M. Ingram, M.D.
Tampa

Corrections

In the Special Issue on Perinatology, page 716, James M. Ingram, M.D. was listed as the Director of the Obstetric Component of the Regionalized Perinatal Program at the University of South Florida. The Director of the Obstetric Component should have been Robert A. Knuppel, M.D.

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Book Review Editor — **F. Norman Vickers, M.D.**

Running West

By Jan Krofta, 196 Pages. Price $8.95. Vantage Press.

This book is a gripping tale of murder, rapes, escape from an eastern country, probably Czechoslovakia, and the detective and forensic pathologic methods used in solving the crimes involved. Martin Siegel, with the help of Komar, escapes into Germany and gives Komar the name of a relative, Charles Friedman, in the old country who wants to escape to the west. Komar writes to Charles to meet him in Varnov, the nearby town. When Charles comes, Komar gets the name of Helen, George and Lisa Berka who also want to escape to Germany. Komar then leads Charles into the wood where he kills him and steals his money and jewels. Komar then writes the Berkas to send Lisa and Helen to him and says that he will get them across the border. George is to follow and Komar will arrange to get him into Germany. When Helen and Lisa arrive, Helen is raped and killed and Lisa is confined in a cellar and repeatedly raped by Komar. When George arrives, he is also murdered. The unravelling of this drama is carried out by Dr. Meiner, a forensic pathologist, and Lieutenant Rubart, the chief of the homicide squad. The clever telling of the story makes for interesting and at times exciting reading.

The most poignant part of the book is the pathetic desire of the escapees to leave a sterile and repressive life in the old country and to seek lands where they feel there is more opportunity and reward for their labors. There are descriptions of escapes by foot, by railway train and by air and in all of these, the escapees were fired on by border guards or soldiers. There is a description of a refugee camp in Germany where the escapees were taken for processing and eventual resettlement to Germany, Canada, Australia and other countries. The camp and many of the details are so well done because the author himself followed the same route and experienced the same feelings as many of his characters. The author, Jaroslav J. Jilek, M.D., uses the pen name Jan Krofta. Dr. Jilek practices Urology in Jacksonville.

Frederick H. Bowen, M.D.

● Dr. Bowen is a retired surgeon residing in Jacksonville.

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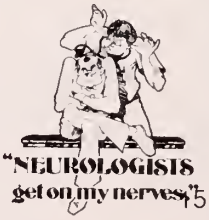
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Auxiliary Fall Conference

The Fall Conference of the Auxiliary was held September 20-22 in Winter Haven. This years theme "Auxiliary On the Move" was literally and figuratively kept through our many modes of transportation during the Conference. The South District delegates traveled to and from the Conference by train. While attending the Conference delegates arrived at the Wednesday cocktail party by boat or bus, and a tram provided the transportation for those delegates who toured Cypress Gardens. More importantly was the fact that the minds of delegates were on the move.

The Forum on Aging was held Wednesday morning with Mrs. Fred P. Swing (Ann) as the moderator. The guest speaker was Gail Newell, a social worker currently with the Florida Department of Health and Rehabilitative Services. Ms. Newell covered the topic of "The Fit and the Frail, a Practiced Approach to Aging." With 17.3% of Florida's population over 65, Florida is the aging capital of the world. This makes Florida's elderly population the highest in the Nation with the National average of 11.3%.

At the Wednesday luncheon, Mrs. Thomas Fields (Donna), AMA-A Membership Chairman, spoke on membership. Wednesday night a banquet was held at Cypress Gardens Terrace. Wiley Koon, M.D., President of the Polk County Medical Society, gave the welcoming remarks. J. Lee Dockery, M.D., President of the FMA, and Senator Bob Crawford of the Florida Senate were guest speakers. Senator Crawford's topic was "Grass Roots Politics."

The seminar on substance abuse was held on Wednesday afternoon, and featured two speakers of national reknown: Donald Ian Macdonald, M.D. and Marsha Keith Nanatt Schuchard, Ph.D., author of "Parents, Peers and Pot." They explained that the use of drugs has been very successfully marketed to children of this nation because of its high profits and our tradition of free speech. The speakers recommended that parents form "Parent Networks" to provide strong direction and firmness in dealing with their children. This is an effective way to put a stop to this devasting problem and the Auxiliary can help.

A working forum on public relations was held on Thursday morning chaired by Mrs. John M. Canakaris (Georgia). Susan Bridges, Motivator, gave an excellent keynote speech. The new Auxiliary tape made for television was shown for the first time. Its catchy music and impressive message took everyone's breath away! Tips were given for the state-wide Media Day, October 4, in which auxilians would be honoring representatives from newspapers, magazines, television and radio. At Media Day, the emphasis was on community services and health education provided by the Auxiliary. A new comic strip, featuring the HASTY (Health and Safety Tips for You) family, will be appearing in newspapers throughout the State.

As always, fund-raising activities were a part of the Fall Conference. The profits will go to International Health, FMF (Florida Medical Foundation) and AMA-ERF (American Medical Association Education and Research Foundation). Members were selling T-shirts, Florida citrus fruit, holiday greeting cards and bidding on lovely boutique articles in a silent auction. There was also the opportunity to purchase a beautiful quilt composed of Florida theme squares made by each county.

Packed in with all these activities was a delightful social program. Tuesday night, Dr. and Mrs. Arnold Spanjers (Bennie is a Past-President of FMA-A) opened their lovely home for a cocktail party and a festive luau dinner. Wednesday night, the Polk County Medical Society hosted a cocktail party in the beautiful home of Dr. and Mrs. S. Bruce Gerber (Priscilla is President of FMA-A). Cypress Gardens skiers made a special salute to the FMA-A and a tour of the gardens was offered. Thursday's luncheon featured a Parade of Fashions and Flowers from Cypress Gardens.

In summary, the Auxiliary Fall Conference was a busy, successful, enriching and enlightening experience for all of those who attended.

Mrs. L. G. (Mae) White
Ft. Lauderdale



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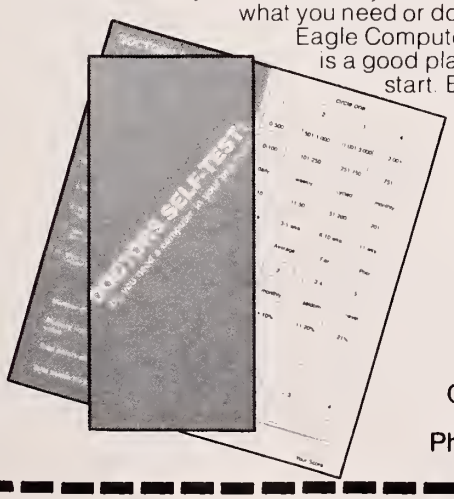
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BAKER, WALTER J., Perry; born 1892; Tulane University, 1915; died 9/20/83.

BATES, JAMES S. JR., Hollywood; born 1927; Medical College of Alabama, 1952; died 9/13/83.

BONNER, OCTAVIUS B. JR., Daytona Beach; born 1928; University of North Carolina, 1951; member AMA; died 7/31/83.

BOSTELMAN, ERNEST, Fort Myers; born 1897; Vanderbilt University, 1923; member AMA; died 2/8/83.

BOURKARD, ERNEST, R., Tampa; born 1915; University of Tennessee College of Medicine, 1939; died 9/23/83.

BRODESKY, HUGO, Jacksonville; born 1937; University of Buenos Aires, 1961; died 1/3/83.

CAHUE, ANTONIO, Maitland; born 1926; University of Havana, 1951; died 6/18/83.

CHAPMAN, BENJAMIN A., Jacksonville; born 1885; Georgia College of Medicine and Surgery, 1910; died 8/28/83.

CONNELLY, THOMAS R., Ft. Myers; born 1946; Jefferson Medical College, Philadelphia, 1970; died 10/4/83.

DANCE, CLIFTON L., JR., Fort Lauderdale; born 1920; Wayne State University, 1948; member AMA; died 1/3/83.

DAVIDSON, SIDNEY W., Lake Worth; born 1910; New York University, 1936; member AMA; died 7/12/83.

DOMEIER, LUVERNE H., St. Petersburg; born 1914; Loyola University, 1940; member AMA; died 7/21/83.

HOOPINGARNER, NEWMAN A., Dunedin; born 1919; New York University, 1945; member AMA; died 7/25/83.

EVANS, ELWYN, Orlando; born 1901; Rush Medical School, 1934; member AMA; died 5/27/83.

FARRELL, JOHN J., Lake Worth; born 1917; Harvard Medical School, 1942; member AMA; died 4/9/83.

FITTS, WILLIAM L., Vero Beach; born 1910; Tulane, 1938; died 9/22/83.

FLANNERY, MARVIN G., Miami; born 1905; Rush Medical College, Chicago, 1932; member AMA; died 9/28/80.

FLAX, ELLIS, Fort Myers; born 1909; University of Cincinnati, 1934; died 3/16/83.

FULLER, HENRY W., Lakeland; born 1902; Harvard Medical School, 1927; member AMA; died 8/3/83.

FUREY, EDWARD T., Orlando; born 1894; Wayne State University, 1940; member AMA; died 2/20/83.

GARCIA, YFRAELIO, Miami; born 1914; University of Havana, 1955; died 1/8/83.

GARMANY, GEORGE H., Tallahassee; born 1907; University of Tennessee, 1932; member AMA; died 7/8/83.

GENEST, ALORIA H., Los Gatos, 1889; Tufts University, 1920; member AMA; died — date unknown.

GLUECKAUF, LEWIS G., Miami; born 1907; Chicago University, 1936; died 9/24/83.

GRAVES, J. RAYMOND, Miami; born 1945; Emory University, 1922; died 10/17/83.

HEDIGER, ELLA M., Miami; born 1900; New York University, 1923; died August 1983.

HORNSBY, AUBREY T., Pensacola; born 1922; Columbia University, 1946; member AMA; died 3/5/83.

INGERSOLL, ROBERT E., Key Largo; born 1915; University of Rochester, 1939; member AMA; died — date unknown.

JACK, RALPH W., Miami; born 1903; Johns Hopkins University, 1930; member AMA; died — date unknown.

JONES, WALTER C., JR., Miami; born 1896; Emory University, 1921; member AMA; died 6/18/83.

LEVY, MORTON W., Orlando; born 1917; Tulane University, 1941; member AMA; died 7/13/83.

LUCINIAN, JOSEPH, H., Miami Beach; born 1894; University of Virginia, 1924; member AMA; died 3/17/83.

MEDLIN, WILLARD B., Miami; born 1892; Emory University, 1915; member AMA; died 11/4/77.

MERIWETHER, WILLIAM G., Tampa; born 1908; Medical College of South Carolina, 1940; died 8/12/83.

MIRANDA, ZENAIDA Q., St. Petersburg; born 1941; University of Santo Tomas, Philippines, 1956; member AMA; died 8/6/83.

MOORE, WILLIAM A., III, Tampa; born 1920; Creighton University, Nebraska, 1946; died 8/7/83.

MOOTY, ROSS H., Winter Haven; born 1886; University of Alabama, 1911; member AMA; died 8/6/82.

NATHANSON, FLORENCE, Miami; born 1911; New York University, 1935; member AMA; died 5/83.

NELSON, THOMAS F., Tampa; born 1910; University of Illinois, 1935; member AMA; died 3/12/83.

PEARSON, NELSON T., Coral Gables; born 1897; St. Louis University, 1923; member AMA; died 1/27/83.

POUGET, RENE RODRIGUEZ, Miami; born 1926; Havana University, 1952; died 9/14/83.

ROG, M. MARK, Fort Walton Beach; born 1924; University of Bern, 1949; member AMA; died 8/31/82.

ROSENBERG, ALEXANDER E., Miami; born 1900; Yale University, 1926; died 10/4/83.

SANDES, HAROLD L., Tampa, born 1925; Emory University, 1947; member AMA; died 7/18/83.

SAPORITO, CHARLES J., Plantation; born 1933; Louisiana State University, 1957; died 9/8/83.

SCOTT, JOSEPH W., Miami; born 1916; University of Maryland, 1942; member AMA; died 8/1/83.

SHARP, LEE, Pensacola; born 1909; Ohio State University, 1934; member AMA; died 7/20/83.

SINCOFF, ARTHUR B., Fort Lauderdale; born 1921; Chicago Medical School, 1945; member AMA; died 12/82.

SLOSEK, EDWARD F., Tallahassee; born 1910; Tufts University; died 7/21/83.

SMITH, JAMES A., JR., Miami; born 1892; Emory University, 1914; member AMA; died 8/20/82.

SPOTO, NELSON J., Tampa; born 1931; Tulane, 1956; died 8/12/83.

SQUIRES, GRETCHEN V., Pensacola; born 1914; Louisiana State University, 1938; member AMA; died 10/4/83.

STIPE, HARVIE J., Fort Myers; born 1905; Emory University, 1933; member AMA; died 7/12/83.

STRASSER, HAROLD S., West Palm Beach; born 1934; University oy Florida, 1962; member AMA; died 2/10/83.

THOMPSON, EDGAR B., Orlando; born 1932; Emory University, 1956; member AMA; died 1/5/83.

TORRETTA, JOSEPH N., Tampa; born 1904; Tulane University, 1928; member AMA; died 5/9/83.

WEEMS, HOWARD V., Sebring; born 1896; Emory University, 1921; member AMA; died 6/22/83.

WILLIAMS, EDWARD H., Miami; born 1905; Virginia Medical College, 1930; member AMA; died October 1983.

YESTE, DIXON, Miami; born 1941; University of Miami, 1965; member AMA; died 7/18/83.

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*Committee on Dietary Allowances, National Research Council: *Recommended Dietary Allowances*, ed. 9. Washington, DC, National Academy of Sciences, 1980, p. 13.

Please see summary of product information on reverse page.

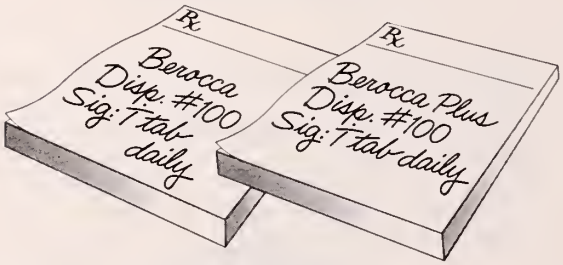
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WARNINGS: Not for pernicious anemia or other megaloblastic anemias where vitamin B_{12} is deficient. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with vitamin B_{12} deficiency who receive supplemental folic acid and who are inadequately treated with B_{12}.

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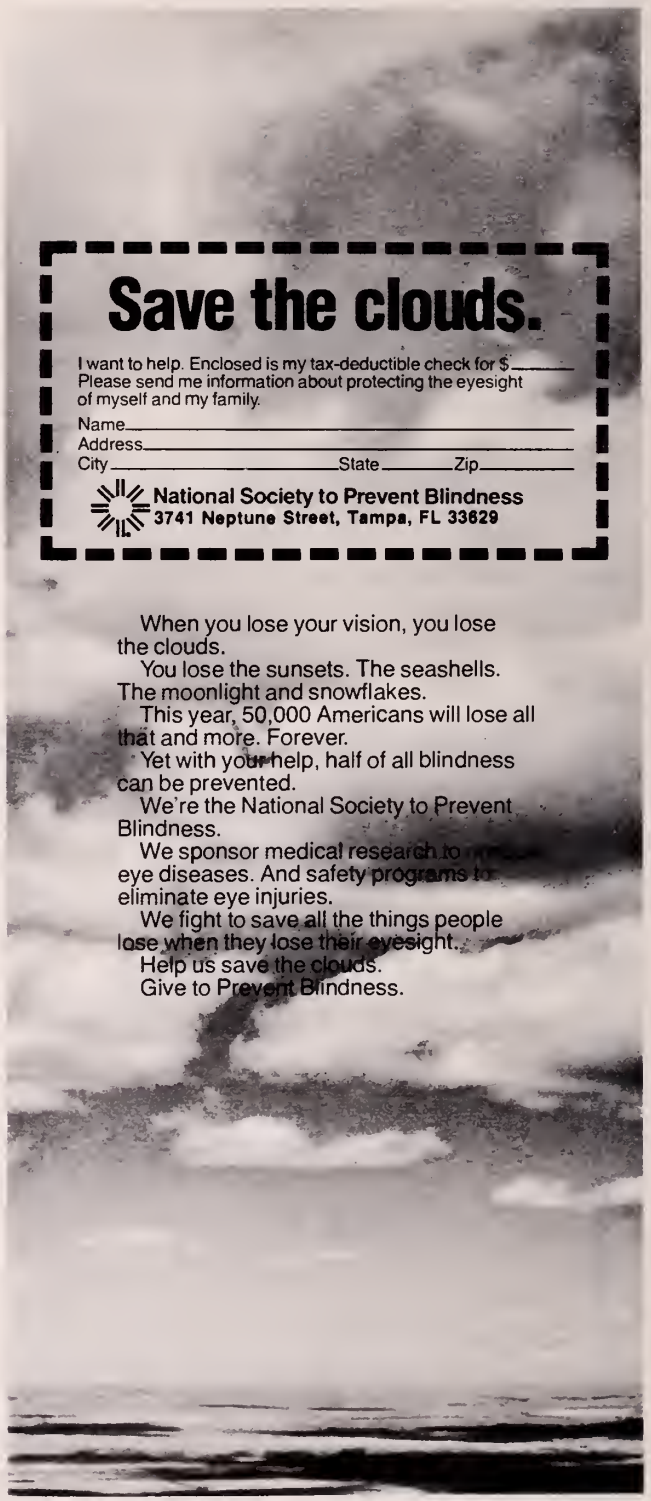
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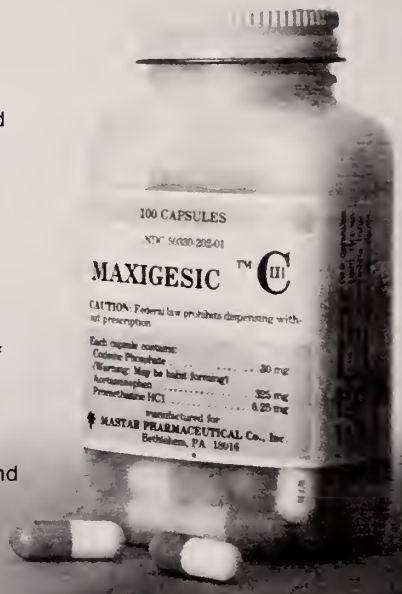
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Pediatric Use: Should not be administered to children under 12.

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DECEMBER

Neuro-Opthalmology Course, December 1-3, Univ. of Miami, Miami Beach. For information: Gaby Kressly, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 326-6099.

Emergencies In Internal Medicine VI, December 1-6, Frenchman's Reef Resort, St. Thomas, U.S. Virgin Islands. For information: Division of CME, D23-3, Univ. of Miami School of Medicine, P.O. Box 016960, Miami 33101, (305) 547-6716.

Update on Cardiovascular Clinical Pharmacology, Dec. 2, Holmes Regional Medical Center, Melbourne. For in fo.: Eugene Shepherd, M.D., Medical Staff Office, HRMC, 1350 Hickory Street, Melbourne 32901, (305) 676-7144.

Cardiovascular Disease: Non-Invasive Diagnostic Methods, December 2-4, Bahia Mar Hotel, Ft. Lauderdale. For information: Margaret Kleiger, (800) 525-8651, Ext. 125.

4th Annual "Interamerican Medical Symposium" Dec. 4-8, Dutch Resort Hotel, Lake Buena Vista. For information: Jose S. Bocles, M.D., Univ. of Miami, Miami, (305) 547-6063.

Non Cemented Ceramic Total Hip Replacement, Dec. 6, Sheraton Bal Harbour, Bal Harbour. For information: Dennis W. Cahill, University of Miami, P.O. Box 016960, Miami 33101, (305) 547-6996.

Controversies in Rhematology, Dec. 6-8, Hotel Royal Plaza, Lake Buena Vista. For information: Jeffrey E. Poiley, M.D., 615 E. Princeton Street, Orlando 32803, (305) 896-8861.

Ultrasound as Used In Modern OB-GYN, Dec. 7-11, Univ. of Miami, Miami Beach. For information: Patti Mundy, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6944.

Clinical Allergy and Immunology for the Practicing Physician, Dec. 8-10, Buena Vista Palace, Lake Buena Vista. For info.: Richard F. Lockey, M.D., (813) 972-2000, Ext. 597.

Clinical Enzyme Evaluations, Dec. 9, Holmes Regional Medical Center, Melbourne. For info.: Eugene Shepherd, M.D., Medical Staff Office, HRMC, 1350 Hickory Street, Melbourne 32901, (305) 676-7144.

Surgery and Rehabilitation of Complex Problems of Upper Limb, Dec. 9-11, Bal Harbour. For info.: JoAnn Harris, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6200.

Practical Applications: Behavioral Medicine and Neuropsychology, December 10-11, Northwood Medical Center, West Palm Beach. For information: Robert K. Alsofrom, Ph.D., Northwood Medical Center, 2617 N. Flagler Dr., Suite 505, West Palm Beach 33407, (305) 832-8444.

Tutorial Course of Instruction In Coronary Care of the Practicing Physician, Dec. 12-17, Univeristy of Miami, Miami. For information: Michelle J. Enriquez, Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6245.

Rheumatology, December 15, Lake City Medical Center, Lake City. For information: J. Turner Carson, M.D., P.O. Box 2105, Lake City 32056, (904) 755-4793.

3rd Annual Current Concepts in Pain Management: A Comprehensive and Practical Review, Dec. 26-30, Steamboat Springs, Colorado. For information: Donald Berman, M.D., 3301 Johnson Street, Hollywood 33021, (305) 989-6650.

The First 30 Minutes: The Boston City Hospital Approach to Medical and Pediatric Emergencies, Dec. 27, Buena Vista Palace Hotel, Lake Buena Vista. For info.: R. Levin, M.D. Boston City Hospital, 818 Harrison Ave., Boston, MA 02118, (617) 424-5421.

JANUARY 1984

Oral Pathology Review Histology, Differenctial Diagnosis and Management, January 9-13, University of Miami. For info.: Division of CME D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101, (305) 547-6716.

16th Annual Postgraduate Seminar: Pediatric and Adult Urology, January 18-21, Bal Harbour. For info.: Charles M. Lynne, M.D., Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6630.

Treatable Life Threatening Cardio-Pulmonary Episodes, Jan. 20-21, Diplomat Hotel, Hollywood. For info.: Marvin L. Meitus, M.D., 4300 Alton Rd., Miami Beach 33140, (305) 674-2121.

Continuing Education In Pediatrics, Jan. 22-26, Diplomat Hotel, Hollywood. For info.: Donald H. Altman, M.D., 6125 SW 31st Street, Miami 33155, (305) 666-6511.

9th Annual Review and Practical Advances In Pathology, Jan. 23-27, Bal Harbour. For info.: Marie Valdes-Dapena, University of Miami, P. O. Box 016960, Miami 33101, (305) 325-6437.

Tutorial Course In Instruction In Coronary Care for the Practicing Physician, Jan. 23-28, Univ. of Miami. For information: Michelle Enriquez, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6245.

6th Annual Walt Disney World Pulmonary Wintercourse, Jan. 26-29, Hotel Royal Plaza, Lake Buena Vista. For information: Milton S. Braunstein, M.D., 5526 Arlington Road, Jacksonville 32211, (904) 743-2933.

Round Table Day, January 27, Diplomat Hotel, Hollywood. For info.: Donald H. Altman, M.D., 6125 SW 31st Street, Miami 33155, (305) 666-6511.

Oculoplastic Symposium 1984, Jan. 28 - Feb. 4, United States Virgin Islands. For info.: Lawrence Katzen, M.D., 2889 Tenth Ave. North, Lake Worth 33461, (305) 964-0707.

Pediatric Nephrology Seminar XI: Neonatal Kidney & Fluid/ Electrolytes II, Jan. 29 - Feb. 2, Bal Harbour. For information: Pearly Seidler, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 325-6726.

FEBRUARY

Breast Disease Update (II), February 1-5, Hilton at Walt Disney World Village, Lake Buena Vista. For information: Lourdes S. Fuentes, 4300 Alton Rd., Miami Bch. 33140, (305) 674-2424.

Second Annual Interventional Neuroradiology Seminar, Feb. 5-8, Walt Disney World Village Plaza, Lake Buena Vista. For info.: Charleen Krissman, 12901 North 30th Street, Tampa 33612, (813) 974-2538.

Internal Medicine 1984, Feb. 5-10, Sheraton Bal Harbour. For information: Jose Bocles, M.D., Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6063.

3rd Symposium on Burn Care, Feb. 10-11, Sheraton World, Orlando. For information: Hal C. Bingham, M.D., Box J-233, JHMHC, Gainesville 32610, (904) 392-3711.

Florida Midwinter Seminar in Ophthalmology, Feb. 13-15, Lake Buena Vista. For information: Gaby Kressly, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 326-6099.

Tutorial Course of Instruction In Coronary Care for the Practicing Physician, Feb. 13-18, Univ. of Miami. For information: Michelle Enriquez, University of Miami, P.O. Box 016960, Miami 33101, (305) 547-6245.

Florida Midwinter Seminar in Otolaryngology, Feb. 16-18, Lake Buena Vista. For info.: Gaby Kressly, Univ. of Miami, P.O. Box 016960, Miami 33101 (305) 326-6099.

Vail Symposium on Intensive Care, Feb. 18-25, Vail, Co. For info.: Sonja Craythorne, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6411.

Winter Conference on Principles of Practice Management, Feb. 18-25, Vail, CO. For info.: Sonja Craythorne, University of Miami, P.O. Box 016960, Miami 33101, (305) 547-6411.

Symposium on Parkinson Disease, Feb. 20-21, Univ. of Miami, Miami Beach. For information: D. Ram Ayyar, M.D., Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6732.

Conference on the Beach, Feb. 20-25, Daytona Hilton, Daytona. For info.: Richard Dodd, M.D., Post Office Box 1990, Daytona Beach 32015, (904) 258-1584.

Neurological Update 1984, Feb. 22-24, Univ. of Miami, Miami Beach. For information: D. Ram Ayyar, M.D., Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6732.

Pediatric Dermatology Seminar XI, Feb. 23-26, Doral Beach Hotel, Miami Beach. For information: Guinter Kahn, M.D., 16800 NW 2nd Avenue, N. Miami Bch. 33169, (305) 652-8600.

MARCH

Second Annual Clinical Management of the Elderly Patient for the Practicing Physician, March 1-3, Americana Dutch Inn, Orlando. For information: L. Gregory Pawlson, M.D., (202) 676-4269.

Dedication Ceremony and Symposium — Regional Oncology Center, March 2 & 3, Hilton Hotel, Daytona Beach. For information: H. Kerman, M.D., 570 Memorial Circle, Ormond Beach, (904) 672-1852.

10th Annual Conference in Anesthesiology: Special Ten Year Anniversary Conference, March 3-10, Vail, CO. For information: Sonja Craythorne, Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6411.

16th Annual Teaching Conference in Clinical Cardiology, March 7-14, Sheraton Bal Harbour, Bal Harbour. For info.: Michael S. Gordon, M.D., Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6491.

Advances and Improvements in Hernia Surgery, March 15-17, Doral Beach Hotel, Miami Bch. For information: Arthur Gilberg, M.D., 6615 Miami Lakes Drive, East, Miami Lakes 33014, (305) 624-7081.

Current Problems in Poisoning, March 22-24, Hyatt Orlando. For info.: James Hillman, M.D., P.O. Box 18566, Tampa 33679, (813) 251-6911.

Pan American Symposium on Septal Rhinoplasty, March 23-24, Univ. of Miami. For information: Gloria Allington, Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6716.

Practical Aspects of Newer Cardiovascular Renal Drugs, March 26-29, Orlando Hyatt Regency, Lake Buena Vista. For information: University of Miami, CME Dept., P.O. Box 016960, Miami 33101, (305) 547-6716.

APRIL

Advanced Cardiac Life Support, April 6-8, Pasco -- Hernando Community College, New Port Richey. For info.: James M. Marlowe, M.D., P.O. Box 1058, New Port Richey 34291-1058, (813) 842-9574.

Stress and the Hot Reactor: Is It Worth Dying For? April 16-18, Buena Vista Palace Hotel, Orlando. For info.: Robert Eliot, M.D., Florida Heart Institute, 500 E. Rollins, Suite 101, Orlando 32803, (305) 897-1575.

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_____	005 Digitalis Medicines
_____	034 Ergot Derivatives
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_____	026 Ethosuximide
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_____	024 Guanethidine
_____	022 Haloperidol
_____	023 Hydralazine
_____	035 Indomethacin
_____	015 Insulin
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OPHTHALMOLOGIST — Veterans Administration Outpatient Clinic in West Palm Beach, Florida area seeking part-time Ophthalmologist. Hours and salary to be arranged. Write or call Seymour Chasan, M.D., Chief Medical Officer, VA Outpatient Clinic, 301 Broadway, Riviera Beach, Florida 33404, (305) 845-2800.

CARDIOLOGIST — Veterans Administration Outpatient Clinic in West Palm Beach, Florida area seeking part-time Cardiologist. Hours and salary to be arranged. Write or call Seymour Chasan, M.D., Chief Medical Officer, VA Outpatient Clinic, 301 Broadway, Riviera Beach, Florida 33404. (305) 845-2800.

VETERANS ADMINISTRATION OUTPATIENT CLINIC in West Palm Beach, Florida area seeking internal medicine or primary care physician, boards preferable. Five days a week, 8AM - 4:30PM, no emergency calls. Write or call Seymour Chasan, M.D., Chief Medical Officer, VA Outpatient Clinic, 301 Broadway, Riviera Beach, Florida 33404, (305) 845-2800.

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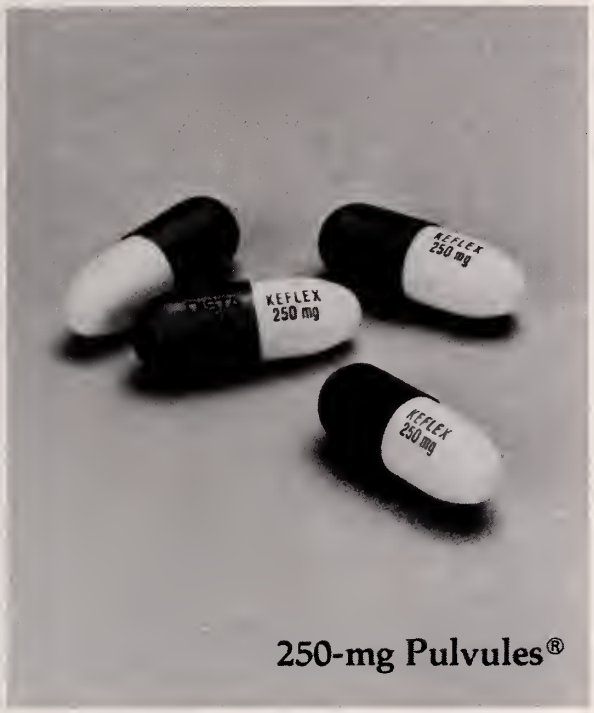
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Manuscripts should be submitted to Daniel B. Nunn, M.D., Editor of *The Journal*, Florida Medical Association, Post Office Box 2411, Jacksonville, Florida 32203, in original and three duplicate copies. Copies should be typewritten and double spaced.

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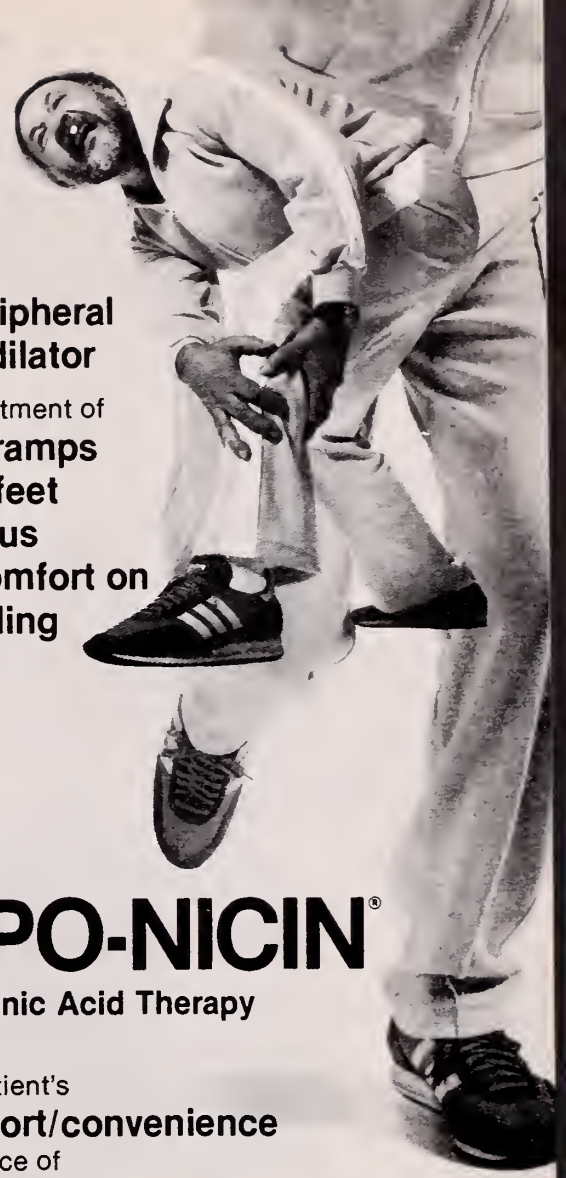
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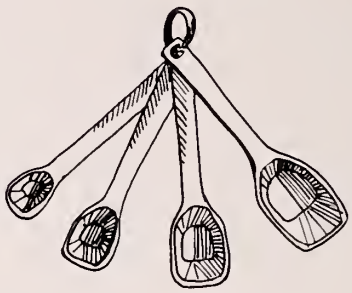
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4 egg yolks, well beaten
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½ cup lime juice (4-6 limes)
*6 egg whites**
½ tsp. cream of tartar
¾ cup sugar
1 9" graham cracker pie shell, baked

In a small mixing bowl beat egg yolks until lemon-colored. Blend in condensed milk. Add lime juice; mix well. In a large mixing bowl beat egg whites and cream of tartar until foamy. Continue beating, adding sugar 1 tablespoon at a time until egg whites peak. Fold 6 tablespoons of meringue into the filling mixture. Pour into pie shell. Top with meringue and bake in a slow 330°F oven for about 30 minutes or until golden brown. Best served chilled. May be frozen and kept for a couple of days before serving.

*You can make the meringue with only 4 egg whites from the eggs you've used

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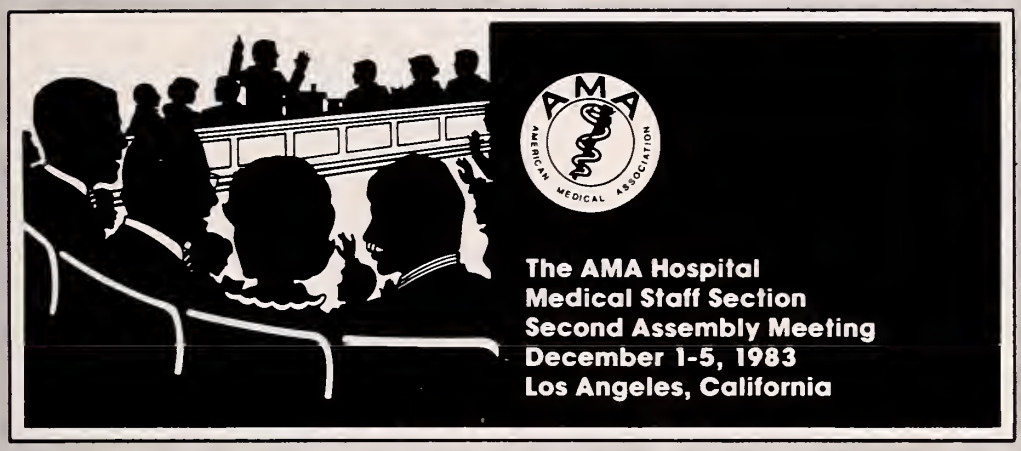
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References: 1. Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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Do not use this drug in patients with narrow-angle glaucoma, obstructive or paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrage, severe ulcerative colitis, toxic megacolon complicating ulcerative colitis, myasthenia gravis. Do not use in nursing mothers.

Use in treating lower respiratory tract symptoms, including asthma, is contraindicated.

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Usage in pregnancy: Safe use in pregnancy has not been established. Use only when the potential benefits have been weighed against the possible hazards to the mother and child. Note that an inhibitory effect on lactation may occur.

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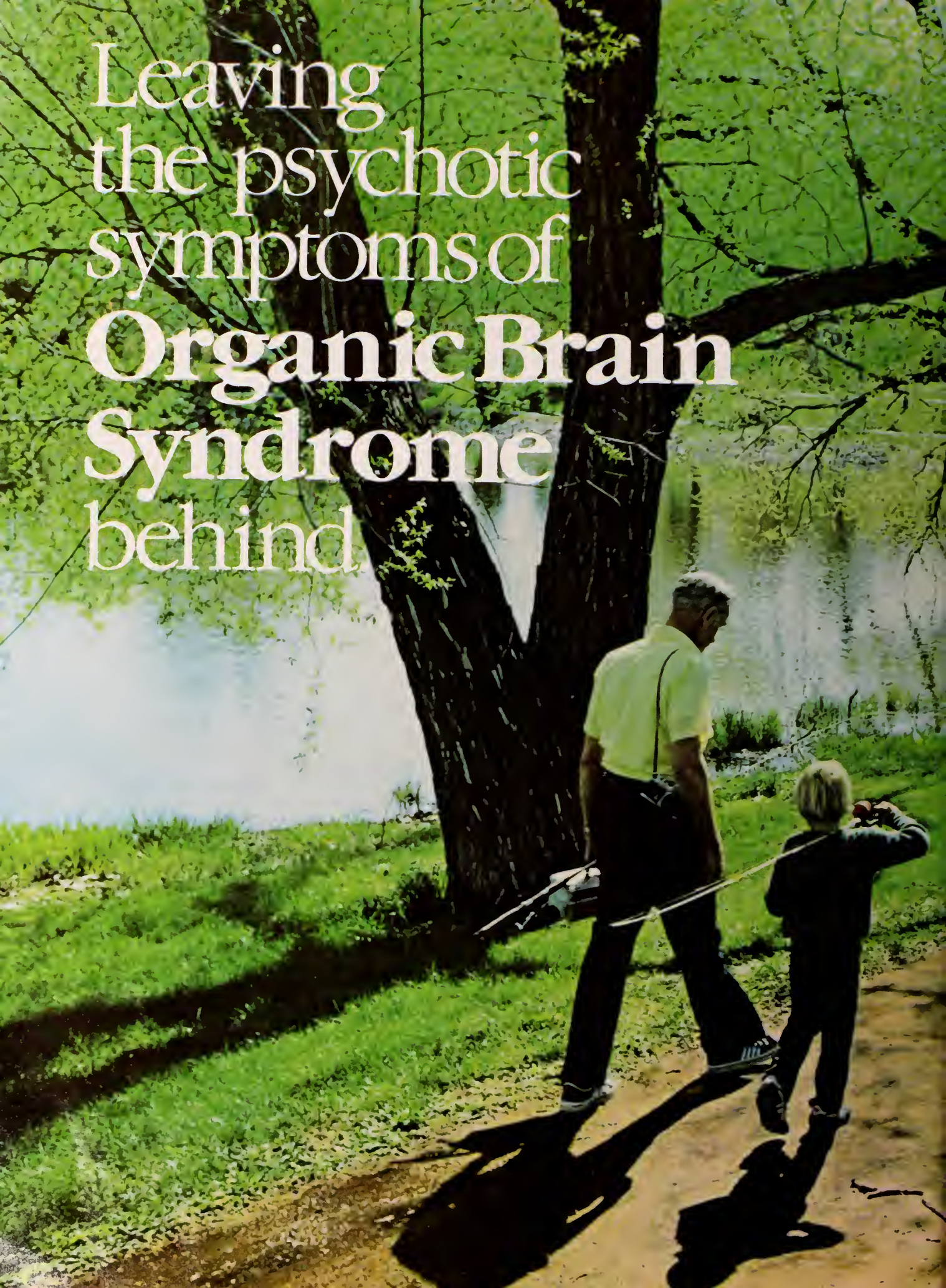
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References 1. Util TM, Unverdi C, Wohlrade J, et al Drug therapy of psychosis associated with organic brain syndrome Presented as a Scientific Exhibit at the American Public Health Association Centennial, Atlantic City, New Jersey, November 12-16, 1972 2. Katz MM, Util TM Video methodology for research in psychopathology and psychopharmacology *Arch Gen Psychiatry* 31:204-210, 1974 3. Ketai R Psychotropic drugs in the management of psychiatric emergencies. *Postgraduate Medicine* 58 87-93, 1975. 4. Birkett DP, Hirschfield W, Simpson GM Thiothixene in the treatment of diseases of the senium. *Curr Ther Res* 14 775-779, 1972 5. Data on file at Roerig

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Usage in Children— The use of Navane in children under 12 years of age is not recommended because safety and efficacy in the pediatric age group have not been established

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Though exhibiting rather weak anticholinergic properties, Navane should be used with caution in patients who are known or suspected to have glaucoma, or who might be exposed to extreme heat, or who are receiving atropine or related drugs

Use with caution in patients with cardiovascular disease

Also, careful observation should be made for pigmentary retinopathy, and lenticular pigmentation (fine lenticular pigmentation has been noted in a small number of patients treated with Navane for prolonged periods) Blood dyscrasias (agranulocytosis, pancytopenia thrombocytopenic purpura), and liver damage (jaundice, biliary stasis) have been reported with related drugs

Undue exposure to sunlight should be avoided Photosensitive reactions have been reported in patients on Navane

Neuroleptic drugs elevate prolactin levels, the elevation persists during chronic administration Tissue culture experiments indicate that approximately one-third of human breast cancers are prolactin dependent *in vitro*, a factor of potential importance if the prescription of these drugs is contemplated in a patient with a previously detected breast cancer Although disturbances such as galactorrhea, amenorrhea, gynecomastia and impotence have been reported, the clinical significance of elevated serum prolactin levels is unknown for most patients An increase in mammary neoplasms has been found in rodents after chronic administration of neuroleptic drugs Neither clinical studies nor epidemiologic studies conducted to date, however have shown an association between chronic administration of these drugs and mammary tumorigenesis, the available evidence is considered too limited to be conclusive at this time

Intramuscular Administration— As with all intramuscular preparations, Navane Intramuscular should be injected well within the body of a relatively large muscle The preferred sites are the upper outer quadrant of the buttock (i.e. gluteus maximus) and the mid-lateral thigh

The deltoid area should be used only if well developed, such as in certain adults and older children and then only with caution to avoid radial nerve injury Intramuscular injections should not be made into the lower and mid-thirds of the upper arm As with all intramuscular injections, aspiration is necessary to help avoid inadvertent injection into a blood vessel

Adverse Reactions: *Note* Not all of the following adverse reactions have been reported with Navane (thiothixene) However, since Navane has certain chemical and pharmacologic similarities to the phenothiazines, all of the known side effects and toxicity associated with phenothiazine therapy should be borne in mind when Navane is used

Cardiovascular effects Tachycardia, hypotension lightheadedness, and syncope In the event hypotension occurs, epinephrine should not be used as a pressor agent since a paradoxical further lowering of blood pressure may result Nonspecific EKG changes have been observed in some patients receiving Navane These changes are usually reversible and frequently disappear on continued Navane therapy The incidence of these changes is lower than that observed with some phenothiazines The clinical significance of these changes is not known

CNS effects. Drowsiness, usually mild, may occur although it usually subsides with continuation of Navane therapy The incidence of sedation appears similar to that of the piperazine group of phenothiazines, but less than that of certain aliphatic phenothiazines Restlessness, agitation and insomnia have been noted with Navane (thiothixene) Seizures and paradoxical exacerbation of psychotic symptoms have occurred with Navane infrequently

Hyperreflexia has been reported in infants delivered from mothers having received structurally related drugs

In addition, phenothiazine derivatives have been associated with cerebral edema and cerebrospinal fluid abnormalities.

Extrapyramidal symptoms, such as pseudo-parkinsonism akathisia, and dystonia have been reported Management of these extrapyramidal symptoms depends upon the type and severity Rapid relief of acute symptoms may require the use of an injectable antiparkinson agent More slowly emerging symptoms may be managed by reducing the dosage of Navane and or administering an oral antiparkinson agent

Persistent Tardive Dyskinesia As with all antipsychotic agents tardive dyskinesia may appear in some patients on long term therapy or may occur after drug therapy has been discontinued. The risk seems to be greater in elderly patients on high-dose therapy, especially females The symptoms are persistent and in some patients appear to be irreversible The syndrome is characterized by rhythmical involuntary movements of the tongue face, mouth or jaw (e g , protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements) Sometimes these may be accompanied by involuntary movements of extremities



There is no known effective treatment for tardive dyskinesia, antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear

Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked

It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time, the syndrome may not develop

Hepatic effects. Elevations of serum transaminase and alkaline phosphatase, usually transient, have been infrequently observed in some patients. No clinically confirmed cases of jaundice attributable to Navane (thiothixene) have been reported

Hematologic effects As is true with certain other psychotropic drugs, leukopenia and leukocytosis, which are usually transient, can occur occasionally with Navane Other antipsychotic drugs have been associated with agranulocytosis, eosinophilia, hemolytic anemia, thrombocytopenia and pancytopenia

Allergic reactions: Rash, pruritus, urticaria, photosensitivity and rare cases of anaphylaxis have been reported with Navane Undue exposure to sunlight should be avoided Although not experienced with Navane, exfoliative dermatitis and contact dermatitis (in nursing personnel) have been reported with certain phenothiazines.

Endocrine disorders Lactation, moderate breast enlargement and amenorrhea have occurred in a small percentage of females receiving Navane If persistent, this may necessitate a reduction in dosage or the discontinuation of therapy Phenothiazines have been associated with false positive pregnancy tests, gynecomastia hypoglycemia hyperglycemia, and glycosuria

Autonomic effects Dry mouth, blurred vision, nasal congestion, constipation, increased sweating increased salivation, and impotence have occurred infrequently with Navane therapy Phenothiazines have been associated with miosis, mydriasis, and adynamic ileus

Other adverse reactions: Hyperpyrexia anorexia, nausea vomiting diarrhea, increase in appetite and weight weakness or fatigue polydipsia and peripheral edema

Although not reported with Navane evidence indicates there is a relationship between phenothiazine therapy and the occurrence of a systemic lupus erythematosus-like syndrome

NOTE Sudden deaths have occasionally been reported in patients who have received certain phenothiazine derivatives In some cases the cause of death was apparently cardiac arrest or asphyxia due to failure of the cough reflex In others, the cause could not be determined nor could it be established that death was due to phenothiazine administration

Dosage and Administration: Dosage of Navane should be individually adjusted depending on the chronicity and severity of the condition In general, small doses should be used initially and gradually increased to the optimal effective level, based on patient response

Some patients have been successfully maintained on once-a-day Navane therapy

Usage in children under 12 years of age is not recommended because safe conditions for its use have not been established

Navane Intramuscular Solution Navane For Injection— Where more rapid control and treatment of acute behavior is desirable the intramuscular form of Navane may be indicated It is also of benefit where the very nature of the patient's symptomatology whether acute or chronic, renders oral administration impractical or even impossible

For treatment of acute symptomatology or in patients unable or unwilling to take oral medication, the usual dose is 4 mg of Navane Intramuscular administered 2 to 4 times daily Dosage may be increased or decreased depending on response Most patients are controlled on a total daily dosage of 16 to 20 mg The maximum recommended dosage is 30 mg/day An oral form should supplant the injectable form as soon as possible It may be necessary to adjust the dosage when changing from the intramuscular to oral dosage forms Dosage recommendations for Navane (thiothixene) Capsules and Concentrate appear in the following paragraphs

Navane Capsules Navane Concentrate In milder conditions, an initial dose of 2 mg three times daily If indicated, a subsequent increase to 15 mg/day total daily dose is often effective

In more severe conditions, an initial dose of 5 mg twice daily.

The usual optimal dose is 20 to 30 mg daily. If indicated an increase to 60 mg/day total daily dose is often effective Exceeding a total daily dose of 60 mg rarely increases the beneficial response

Overdosage: Manifestations include muscular twitching, drowsiness, and dizziness Symptoms of gross overdosage may include CNS depression, rigidity, weakness, torticollis, tremor, salivation, dysphagia hypotension, disturbances of gait, or coma

Treatment Essentially is symptomatic and supportive For Navane oral, early gastric lavage is helpful For Navane oral and Intramuscular, keep patient under careful observation and maintain an open airway since involvement of the extrapyramidal system may produce dysphagia and respiratory difficulty in severe overdosage If hypotension occurs, the standard measures for managing circulatory shock should be used (I V fluids and or vasoconstrictors)

If a vasoconstrictor is needed, levarterenol and phenylephrine are the most suitable drugs Other pressor agents, including epinephrine, are not recommended, since phenothiazine derivatives may reverse the usual pressor action of these agents and cause further lowering of the blood pressure

If CNS depression is present and specific therapy is indicated, recommended stimulants include amphetamine, dextroamphetamine or caffeine and sodium benzoate Stimulants that may cause convulsions (e g picrotoxin or pentylenetetrazol) should be avoided Extrapyramidal symptoms may be treated with antiparkinson drugs

There are no data on the use of peritoneal or hemodialysis, but they are known to be of little value in phenothiazine intoxication

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CONTRAINDICATIONS: Hypersensitivity to Hydrocodone Bitartrate and/or Guaifenesin.

WARNINGS: Hydrocodone Bitartrate can produce drug dependence and tolerance may develop upon repeated use.

Adatuss DC should be prescribed with the same degree of caution appropriate to other oral narcotic containing preparations.

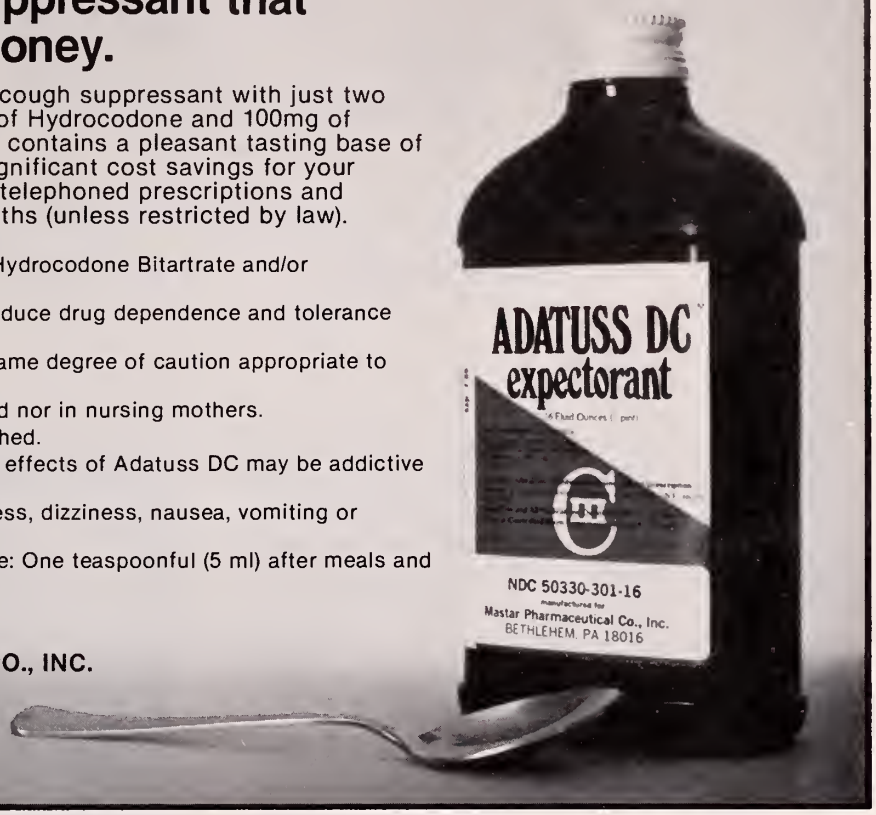
Usage in pregnancy has not been established nor in nursing mothers.

Usage in children also has not been established.

DRUG INTERACTIONS: The CNS depressant effects of Adatuss DC may be addictive with other CNS depressants.

ADVERSE REACTIONS: Occasional drowsiness, dizziness, nausea, vomiting or constipation may be observed.

DOSAGE AND ADMINISTRATION: Adult dose: One teaspoonful (5 ml) after meals and at bedtime as needed.



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Announce

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February 17-18, 1984

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An outstanding faculty has been assembled for the symposium which should be of interest to all physicians caring for patients with cardiovascular disease.

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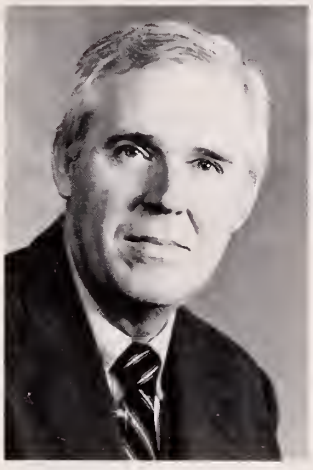
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PRESIDENT'S PAGE

Thoughts from Los Angeles



Dear Colleagues:

These thoughts are written from Los Angeles as I sit in the first session of the House of Delegates of the Interim Meeting of the American Medical Association. The activities this afternoon have stirred my confidence in the deliberations that are taking place on behalf of you, me, and the patients we serve. The Secretary of the Department of Health and Human Services, Mrs. Margaret Heckler, delivered a most impressive address on the cost of health care, health care of the elderly and other disadvantaged persons in the United States. The massive complexity of this issue is recognized by Mrs. Heckler and she advocates the solutions of these problems to be carried out to the greatest possible extent through the private sector. It is very important that we, the House of Medicine, accept this challenge and create solutions to avoid legislation or governmental regulations that are objectionable and unsatisfactory.

Frank J. Jirka Jr., M.D., President of the American Medical Association, has delivered his midyear report of the House of Delegates as the foremost health policymaking body in the country as judged by over 90% of the 135 major health care organizations. Dr. Jirka has indicated also that we are in a new medical era, and present and future challenges confronting us will intensify. But, "our strength lies in our unity, every physician must realize the need to be unified", stated Dr. Jirka.

As the agenda of the afternoon has moved along, the House of Delegates has honored Florida and its contribution to organized medicine by commending W. Harold Parham, D.H.A., for his devoted service for 35 years and awarding Richard S. Hodes, M.D., former President of the Florida Medical Association, the Benjamin Rush Bicentennial Award.

The Florida delegation, now 22 members (11 delegates and 11 alternates), is very effective and is now the seventh largest state medical association delegation to the American Medical Association. The Florida delegation is very responsive and participates actively in all of the activities and deliberations of the reference committees and House of Delegates.

The Speaker of the House of Delegates has just stated his encouragement for the formation of hospital medical staff organizations through every state association. Over 500 representatives of hospital medical staffs throughout the country attended the second meeting of the Section on Hospital Medical Staffs.

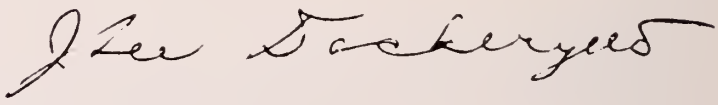
During the next few days, the House of Delegates will consider a variety of issues involving medical education, residency training, foreign medical graduates, medical licensure process, Joint Commission on Accreditation of Hospitals definition of medical staff, UCR and indemnity payment methods of reimbursement and other issues presented through the deliberations of the nine reference committees. The varied emotions racing through me at this time are confidence, pride, happiness, gratitude and awe of our tremendous health care system and the processes available to each of us in establishing and changing health policy. However, I am quickly overcome with the sense of alarm and concern as I inventory our problems of apathy and lack of participation by a large number of physicians. It seems almost an impossible task to communicate the danger and threat of destruction to the way in which medicine is practiced today. Our lack of involvement, disinterest, and poor response to the many criticisms leveled at medicine threaten to destroy us. If medicine loses control over its destiny, then the choices for physicians and patients will be transferred to regulatory agencies and will never be returned to us. It is urgent

that each of us become active, informed, communicate and represent the House of Medicine in the best possible way. Our patients must be told and shown that if the present system of health care delivery is destroyed they, too, lose control of access and quality of medical care.

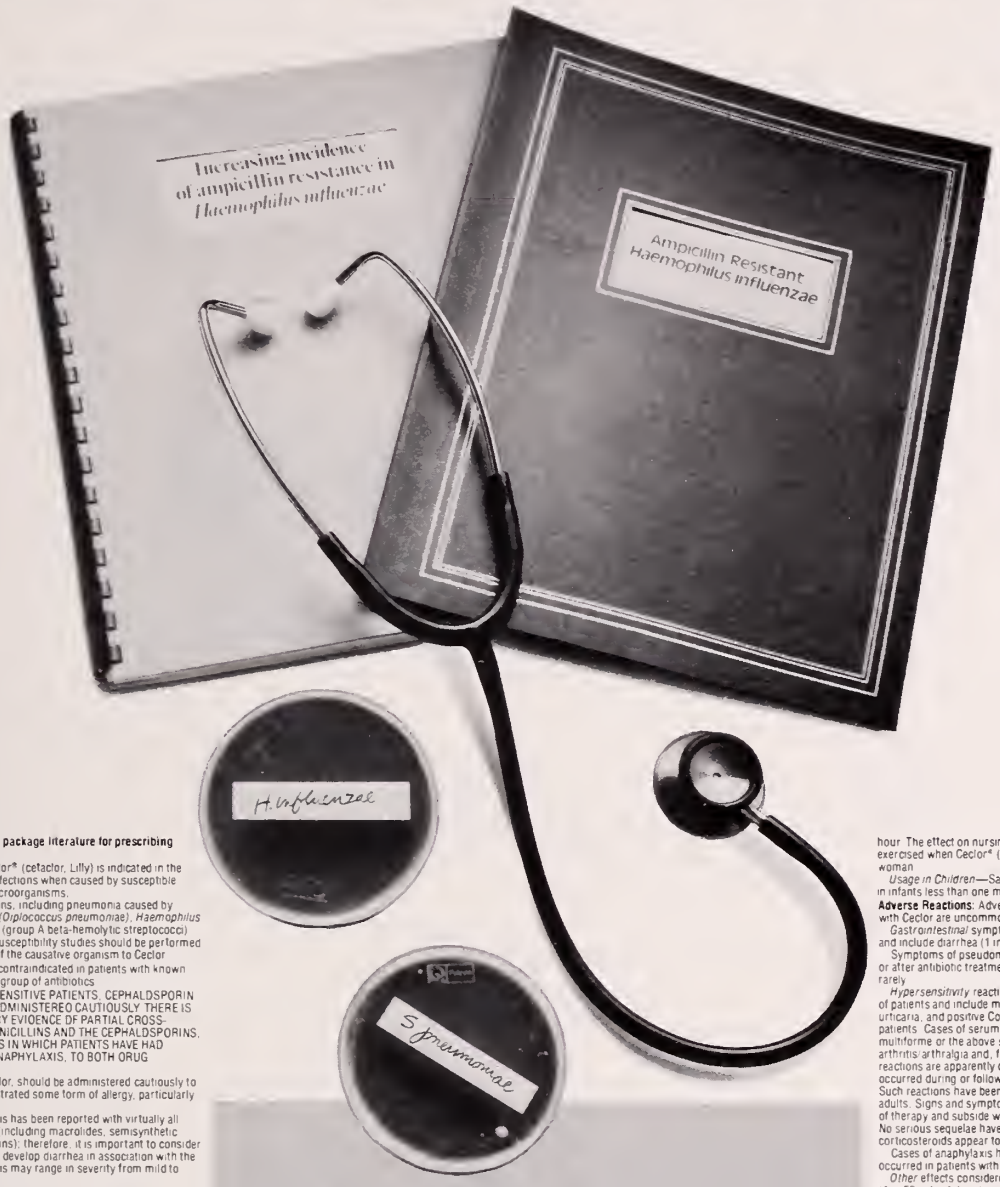
On behalf of the Officers and the Board of Governors of the Florida Medical Association, I extend to each of you seasons greetings and best wishes for a happy and healthy new year. It is my hope that each of you will make the commitment to become more active and involved in the issues affecting organized medicine early in the new year.

Our strength lies in our unity, and every physician must recognize the need to be unified.

Frank J. Jirka Jr., M.D.
President, American Medical Association



An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

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Pulvules®, 250 and 500 mg

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms.

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions*—If an allergic reaction to Ceclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers—Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor® (cefaclor, Lilly) is administered to a nursing woman.

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations of SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[061782R]

* Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

References

1. Antimicrob. Agents Chemother. 8:91, 1975
2. Antimicrob. Agents Chemother., 11:470, 1977
3. Antimicrob. Agents Chemother., 13:584, 1978
4. Antimicrob. Agents Chemother., 12:490, 1977
5. Current Chemotherapy (edited by W. Siegenthaler and R. Luthy), II:880. Washington, D.C.: American Society for Microbiology, 1978
6. Antimicrob. Agents Chemother., 13:861, 1978
7. Data on file, Eli Lilly and Company
8. Principles and Practice of Infectious Diseases (edited by G.L. Mandell, R.G. Douglas, Jr., and J.E. Bennett), p. 487. New York: John Wiley & Sons, 1979

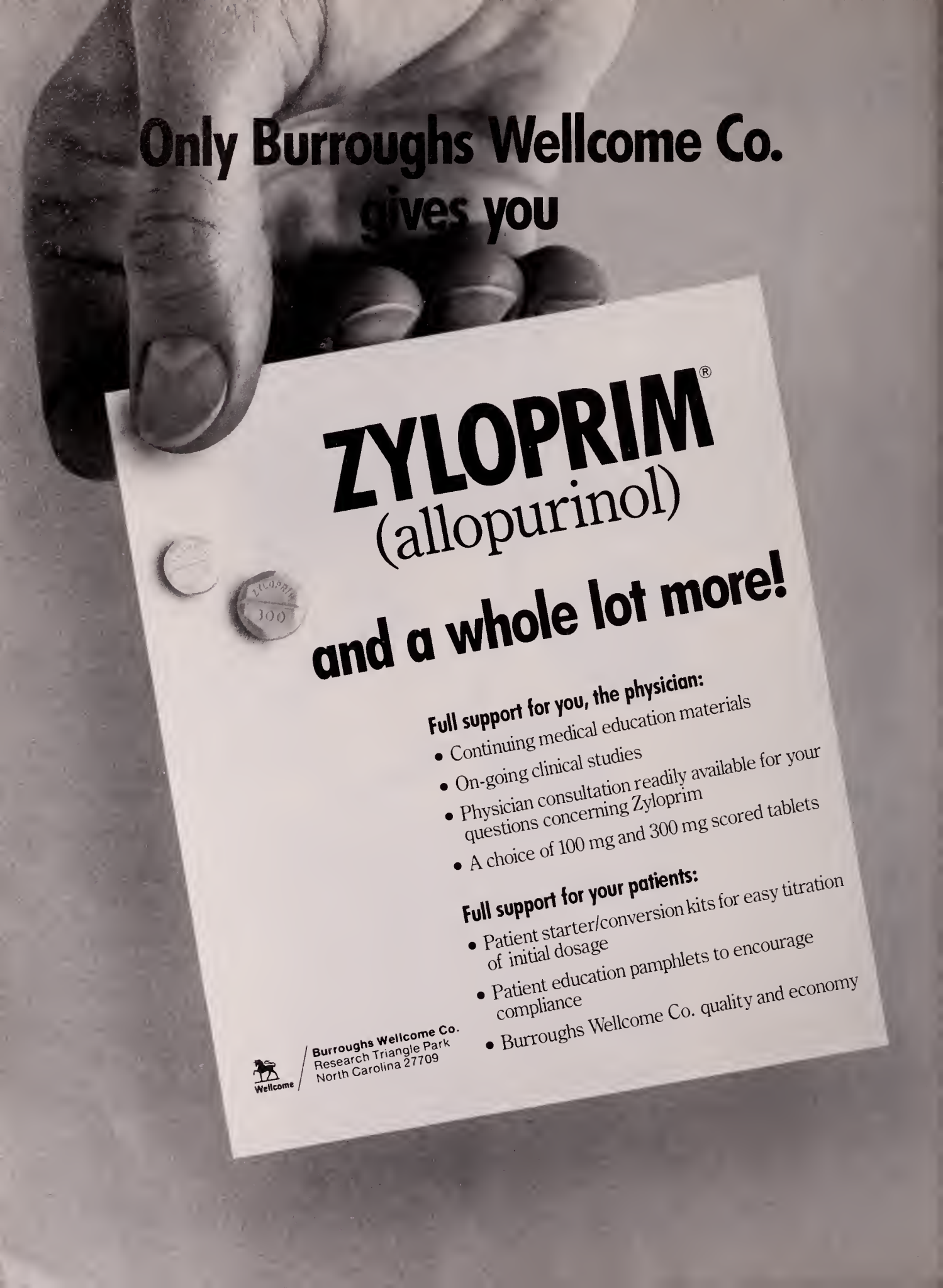
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EDITORIAL

Christmas is Eternal

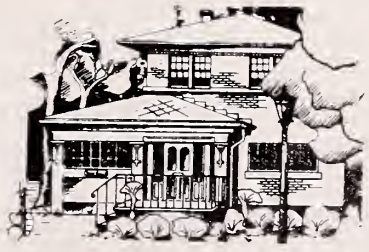
Profound changes are taking place in the lives of the children of America, and at the center of the changes and itself showing a profound transformation, is the American family. As a result of actions seen in businesses, urban planning and transportation systems, this direction of change is one of disorganization rather than harmony; the ultimate effects being seen in courts, clinics, mental and penal institutions. Experienced in the structure and function of society and its primary institutions this is also reflected in the structure and function of individual human beings, especially those still in the process of development.

Family structure weakened by poverty and affluence, is further battered by distorted priorities, personal ambitions, job demands, recreation, community obligations and family mobility producing situations in which a child spends more time with everything else than a participating parent. Yet forces of disorganization appear to arise not from within the family, but rather from circumstances in which the family finds itself and from the way of life imposed upon it by these circumstances, undermining relationships of trust and emotional security. As children are a function of what they have learned and of the way they are handled, so we adults and parents are needed to provide an environment for children to discover their own soul and worth and a spark of divine fire. This task of meeting such vital human needs and transforming lives is far from hopeless for mankind has an inborn capacity to be inspired.

Ah! but it is Christmas, and at this time of year, the Christmas spirit, mysterious and magical as always, makes its appearance. Thus begun, all the gloom, indifference and disorganization in the world cannot stop it from spreading over the entire globe, serving to extinguish petty hatred in the hearts and minds of men. Real values come into focus, gratitude for life, strong faith in a supreme being and inner yearnings of hope for a better world, appear along with the simple miracle of understanding love, that child-like-faith, the eternal light, which children bring into the world. Children, grasping toward understanding and truth, see so surely through the tinsel and the earthly to love, which in them, always strains for expression. At Christmas time it is so much easier to learn that the real gift is one's self and discover every day that there are opportunities to give a part of oneself to some child who needs a right-minded model and guidance. And it's sometimes difficult to learn just what Christmas means, a lesson so often forgotten, that we can truly keep only that which we give away.

So Christmas cannot be looked at properly with a cold and practical eye, it's value cannot be measured, for beyond the symbols and tradition, there is the spirit, the year 'round spirit, if we but seek its source. And Christmas, as symbolized by the miracle of the birth of one Child, no matter how it is celebrated is eternal. For as centuries go by, the reproducing of a baby is for parents, an act of faith, representing a belief in better things to come not just for themselves, but for the world as a whole, and a hope that their child, with each new generation, will produce a better society and friendlier nations, so peace some day will appear on earth.

Clyde M. Collins, M.D.
Jacksonville



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_____	018 Belladonna Alkaloids and Barbiturates
_____	012 Benzodiazepines
_____	004 Beta-Blockers
_____	009 Cephalosporins—Oral
_____	032 Chloramphenicol—Oral
_____	017 Cimetidine
_____	031 Clindamycin/Lincomycin—Oral
_____	016 Corticosteroids—Oral
_____	006 Coumarin-Type Anticoagulants
_____	005 Digitalis Medicines
_____	034 Ergot Derivatives
_____	010 Erythromycin
_____	026 Ethosuximide
_____	001 Furosemide
_____	024 Guanethidine
_____	022 Haloperidol
_____	023 Hydralazine
_____	035 Indomethacin
_____	015 Insulin
_____	038 Iron Supplements
_____	033 Levodopa/Carbidopa and Levodopa
_____	021 Lithium
_____	014 Methyldopa
_____	030 Metronidazole
_____	040 Nifedipine
_____	013 Nitroglycerin Sublingual Tablets
_____	011 Nonsteroidal Anti-Inflammatory Drugs
_____	007 Oral Antidiabetes Medicines
_____	003 Penicillins—Oral
_____	036 Phenylbutazone/ Oxyphenbutazone
_____	019 Phenytoin
_____	037 Quinidine/Procainamide
_____	020 Sulfonamides
_____	008 Tetracyclines
_____	002 Thiazide Diuretics
_____	029 Thyroid Replacement
_____	025 Valproic Acid
_____	039 Verapamil
_____	028 Xanthine Derivatives—Oral

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_____	049 Acetaminophen
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_____	043 Antihistamines
_____	047 Aspirin
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_____	054 Clonidine
_____	048 Codeine
_____	056 Diphenoxylate with Atropine
_____	057 Isotretinoin
_____	059 Methotrexate (for psoriasis)
_____	055 Methysergide
_____	045 Pentazocine—Oral
_____	041 Phenothiazines
_____	058 Potassium Supplements
_____	052 Prazosin
_____	046 Propoxyphene and with Aspirin or Acetaminophen
_____	053 Spironolactone and with Thiazide
_____	060 Steroid and Antibiotic Eye Drops
_____	051 Triamterene and with Thiazide
_____	042 Tricyclic Antidepressants

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Controversies in pulmonary thromboembolism

Lee D. Ettinger, M.D. and David A. Solomon, M.D.

ABSTRACT: Pulmonary embolism (PE) is a common, potentially lethal, disease especially in hospitalized patients. The diagnosis is impossible to make with any degree of certainty if only the history, physical examination or chest roentgenogram are utilized. Much more sophisticated radiologic techniques are necessary. The diagnosis is best established by pulmonary angiography. Treatment is also controversial. The merits of thrombolytic therapy or anticoagulation are discussed.

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The true incidence of pulmonary embolism (PE) is unknown. The difficulty in making an antemortem diagnosis, the small percentage of autopsied deaths and the nonuniform methods for determining and reporting the cause of death when multiple factors are present all contribute to this uncertainty. Epidemiologic studies have estimated that PE is the primary cause of death in approximately 200,000 persons per year in the United States.[1] The majority occur in elderly patients who are hospitalized, live in chronic care facilities, or have chronic debilitating diseases.

Two controversies concerning pulmonary embolic disease need to be discussed in detail: diagnosis, in particular the roles of ventilation-perfusion scanning and pulmonary angiography, and acute medical management. These controversies are the ones most often faced by practicing physicians but certainly do not exhaust the number of decisions which the physician must make in caring for the patient with thromboembolism. Two statistics about PE are particularly impressive: (1) 70-90% of emboli found during postmortem examination were previously undiagnosed,[2] and (2) one third to one half of patients who die from embolic episodes do so within the first two hours following the event. It is clear that the key to reducing mortality from embolism is prevention.

The major controversy concerns the optimal strategy for diagnosis of PE. Although certain clinical symptoms such as dyspnea, pleuritic pain, hemoptysis and physical signs such as tachypnea, accentuated pulmonic component of the second heart sound and tachycardia provide diagnostic clues, they are nonspecific, lack sensitivity and cannot be used to rule in or rule out PE. Unfortunately, the more common and readily available objective tests such as the

chest roentgenogram, electrocardiogram and measurement of arterial blood gases can only heighten or diminish the suspicion for PE. Chest x-ray findings such as a pulmonary infiltrate and/or an elevated hemidiaphragm should alert the physician to the possibility of PE but occur in less than half the patients.[3] The electrocardiogram is normal in 17% to 72% of patients and the abnormalities (arrhythmias, left and right axis deviations and ST-T wave changes) that do occur are nonspecific.[3,4] Most patients with embolism are hypoxemic, but a low PaO_2 is not uncommon in patients with cardiopulmonary diseases other than PE, and a normal PaO_2 can be found in some patients with embolism. All these tests lack either specificity or sensitivity or both and more definitive tests are mandatory to accurately confirm or exclude the diagnosis. The chest roentgenogram is necessary to evaluate perfusion studies and useful to guide angiographic studies.

There should be no doubt that an accurate diagnosis for PE is crucial to optimal management of patients. Underdiagnosis can be a serious flaw, as mortality from untreated PE reportedly ranges from 18-38%.[1] On the other hand, overdiagnosis and subsequent use of anticoagulants are associated with a 30% morbidity and a 2% mortality.[5-10]

Probably the most controversial aspect concerning PE is use of ventilation-perfusion (V/Q) lung scanning. To date, there has been only one prospective, consecutive patient study comparing the diagnostic accuracy of radioactive scintography with pulmonary angiography.[8] Several other studies[9, 11-13] have provided insight into the role of nuclear medicine scans, but differing techniques and results have led to conflicting conclusions and contradictory diagnostic approaches.

Diagnostic procedures • Perfusion lung scanning was introduced almost 22 years ago. Today, the technique involves imaging the chest in six or eight views after the patient has been intravenously injected with ^{99m}TC-labeled macroaggregated albumin or albumin microspheres. The temporary trapping of these particles in the pulmonary arterioles provides an estimation of the relative distribution of pulmonary blood flow. The perfusion study is very sensitive for detecting alterations in pulmonary perfusion but is entirely nonspecific for any single lung condition or disease state, including PE. Perfusion defects can be produced by both extra pulmonary abnormalities (cardiomegaly, mediastinal structures, skeletal deformities, obesity, diaphragmatic paralysis) and intrapulmonary (obstructive lung disease, asthma, vasculitidies, malignancies, pneumonia, atelectasis, effusions) abnormalities.

As PE has been documented only twice in patients with normal perfusion scans, a normal study essentially excludes the diagnosis.[14-16]

On the other hand, an abnormal Q scan is of considerably less value due to its limited specificity.[17] Less than half the patients with abnormal scintigraphy done for suspected PE will have positive angiography,[8,9,12,18] and 25% to 40% will have indeterminate scans in that the perfusion defect corresponds to a radiographic abnormality (infiltrate, atelectasis or effusion). In this group, ventilation is also likely to be abnormal in the same area and further differentiation will require pulmonary angiography. Those patients who have completely normal chest roentgenography or whose x-ray film is at least normal at the site of perfusion defects have an increased likelihood that the defects are secondary to PE. However, the probabilities[8] are still not high enough upon which to base therapeutic decisions.

Ventilation scanning with radioactive xenon, when combined with the technesium perfusion scan, can increase the specificity of the latter in detecting PE.[19] The ^{133}Xe-ventilation study has three phases: the single breath inspiration of xenon gas; the wash-in, lasting 3-5 minutes, during which ^{133}Xe is rebreathed from a closed reservoir, and the wash-out during which the ^{133}Xe is exhaled as the patient breathes room air.

In the following patient groups, ventilation imaging can be eliminated, thus reducing expense, work and time: (1) those with a normal perfusion scan; (2) an indeterminate scan (roentgenographic abnormality in same area as perfusion defect); and (3) those with perfusion defects too small for ^{133}Xe resolution.

Pulmonary emboli usually produce areas of V/Q mismatch but such a mismatch is not specific for PE. A variety of lesions can cause V/Q mismatching including nonthrombotic emboli (fat, air, tumor, foreign material secondary to intravenous drug use), radiation therapy, vasculitis, congenital pulmonary artery anomalies, bronchogenic cancer and other conditions in which external masses cause greater compression on the low pressure pulmonary vasculature than on the more rigid bronchi.[15, 20]

Most investigators have demonstrated an improvement in specificity with combined V/Q imaging; however, this improvement is only great enough to confidently rule in or exclude the diagnosis of PE in a minority of patients.[8, 9, 12, 13, 18] At this time, there are only two V/Q patterns (besides a negative perfusion scan) which have high enough predictive values to preclude the need for pulmonary angiography in most settings. In patients with multiple segmental or larger perfusion defects and corresponding normal ventilation, the frequency of PE is approximately 90%. In patients with multiple matching subsegmental or nonsegmental perfusion and ventilation defects, the probability of PE is less than 5%. Other combinations, such as a perfusion defect substantially larger

(high risk) or substantially smaller (low risk) than the corresponding radiographic abnormality, may ultimately be shown to have high predictive values, but much more work is necessary before clinicians should be comfortable with these common scintigraphic patterns. This is not to suggest that V/Q scans that are "indeterminate" for PE are of no value. Scan defects can help the angiographer to decide where to perform selective injections and where to obtain magnification or oblique views. One point that should be emphasized is that if the clinical suspicion for PE is high enough, then no nuclear medicine study (other than perhaps a totally normal perfusion scan) should exclude the diagnosis and dissuade the physician from obtaining an angiogram.

Pulmonary angiography remains the gold standard in the diagnosis of PE. If the angiographer uses only the criteria of constant intraluminal filling defects or sharp arterial cutoffs for diagnosing emboli, there will essentially be no false positive results. Other abnormalities such as oligemia, asymmetry of flow, vessel pruning and abnormal tapering or loss of filling of small vessels are nonspecific. The ability of the pulmonary angiogram to detect microemboli has been questioned by some investigators. This problem has been addressed in two studies which concluded that a well performed negative angiogram, including the use of superselective injections and magnification views, excludes the existence of clinically significant emboli.[9, 21] There is an increased risk in performing pulmonary angiography as compared with radionuclide scanning, with an associated morbidity of 1-4% and a mortality of less than 0.5%.[17, 22, 23]

The decision to perform pulmonary angiography requires the evaluation of several factors that cannot be precisely quantitated. These factors include: (1) degree of clinical suspicion including knowledge of the patient's particular risks for thromboembolic disease; (2) risk-benefit ratio of anticoagulation therapy; (3) decision to use thrombolytic agents; (4) decision to perform embolectomy or vena caval interruption; (5) results of the ventilation-perfusion studies; and (6) availability, cost, diagnostic accuracy and risks of angiography at the individual institution. Therefore, guidelines for diagnostic approaches can be suggested but the actual scheme must be individualized for each patient.

To summarize, in our opinion, pulmonary angiography is underutilized in most hospitals. The specificity of V/Q scanning is such that an unacceptably high percentage of patients will be evaluated as highly probable for PE but will have a negative angiogram. This group will be unnecessarily subjected to the considerable risks of anticoagulation, risks that far exceed the morbidity and mortality due to pulmonary angiography. Finally, the V/Q scans will incorrectly label a number of patients as low probability for PE who ultimately have positive pulmonary angiograms. This group, if V/Q scans alone are used in the decision making, will not be anticoagulated, thus subjecting patients to a much higher mortality from recurrent emboli.

Treatment • As late as the early 1960s, there was considerable controversy as to the benefit of anticoagulation in the treatment of acute PE. A controlled study by Barritt and Jordan showed a marked decrease in mortality from clinically diagnosed PE from 25% to 0% due to treatment with heparin and dicoumalone.[24] Other studies[1] have shown similar mortalities (18-38%) in untreated PE, whereas more recent reports have shown a mortality of 8% in patients treated with anticoagulants.[3, 25] This is not to suggest that PE is a relatively benign disease with a greater than 90% survival. Patients who live long enough after sustaining an embolic event are in a select group as approximately one third of all embolic patients die within the first hour and never receive a chance for treatment. Regardless, the controversy now does not resolve upon whether or not anticoagulation should be given but upon which agent should be initiated: thrombolytic drugs or intravenous heparin.

Heparin functions as a catalyst by accelerating the rate of reaction between antithrombin III, a natural anticoagulant, and several proteases in the coagulation cascade. This retards thrombin generation and eventually prevents further clot formation, allowing the in vivo fibrinolytic factors to function unimpeded. Heparin, therefore, prevents further thrombus propagation but has no inherent lytic activity.

The thrombolytic agents, urokinase and streptokinase, directly or indirectly activate conversion of plasminogen to plasmin. Plasmin is a nonspecific proteolytic enzyme and produces degradation of prothrombin, fibrinogen, fibrin and factors V and VIII. These drugs cause active clot lysis and can greatly accelerate the time required for fresh thrombus removal and restoration of vascular patency. The fibrinolytic activators thus have a distinct advantage over heparin; the major disadvantage is their nonspecificity in dissolving clots, regardless of whether beneficial or detrimental in maintaining vascular competence.

There are theoretic advantages of urokinase over heparin such as accelerated thrombus lysis, reperfusion and resolution of hemodynamic disturbances. However, these beneficial effects were only documented for the first 24 hours. Lung scans showed no difference in perfusion defect resolution by the fifth day. Furthermore, no difference in thromboembolic recurrence or mortality was noted between the two groups. Even in certain subgroups, although the number of patients was small, the use of urokinase revealed no advantage in patient survival. Only two other controlled studies[26, 27] have likewise demonstrated a differ-

ence between fibrinolytic therapy and heparin of statistical significance but not one of clinical significance.

One other morbid event from venous embolism is the possible development of chronic thromboembolic distortion of the pulmonary vasculature with subsequent pulmonary hypertension. One study has demonstrated a significant improvement in pulmonary capillary blood volume two weeks and then one year after documented embolization.[28] Although the results suggest more complete dissolution of emboli and improved capillary perfusion, the clinical significance remains uncertain. Pulmonary hypertension and/or cor pulmonale secondary to thromboembolism are rare occurrences and have not been documented to occur from a single episode of acute embolism, regardless of size or location.[1, 29-31] Right heart dysfunction, when it does occur due to thromboembolic disease, is most likely secondary to repeated episodes of PE.

The most significant complication of thrombolytic therapy is the heightened potential for bleeding. Both the frequency and severity of bleeding events were increased compared with heparin therapy but were usually secondary to invasive procedures and were controllable. Patients receiving thrombolytic therapy require more intensive monitoring and more diligent management to avoid unnecessary trauma and needle punctures. Except in those patients with an absolute (active internal bleeding, recent cerebrovascular event) or relative (major surgery, organ cavity or noncompressible blood vessel puncture, recent serious trauma, pregnancy and postpartum period, uncontrollable severe hypertension, coagulapathy) contraindication, the risk of hemorrhagic complications has not been shown to be a major deterent to fibrinolytic therapy.[32-33]

Who, then, should receive thrombolytic therapy for PE? There are as many opinions as there are authors.[33-38] The potential advantage of rapid clot lysis, particularly in patients with evidence of right ventricular overload or cardiac insufficiency, remains attractive but will require larger clinical trials to confirm any improvement in patient morbidity or mortality. At this time, thrombolytic agents offer no clear advantages or disadvantages over the more conventional use of heparin in the treatment of pulmonary embolism, and we feel that thrombolytic agents should be reserved for patents with angiographically proven massive PE with hemodynamic compromise.

References

1. Dalen, J E and Alpert, J S : Natural History of Pulmonary Embolism, Prog Cardiovasc Dis 17:257-270, 1975.
2. Moser, K M : Diagnosis and Management of Pulmonary Embolism, Hosp. Pract 15:57-68, 1980
3. The Urokinase Pulmonary Embolism Trial. National Cooperative Study, Circulation 47: Suppl 2:1-108, 1973.
4. Hildner, F J and Ormond, R S : Accuracy of Clinical Diagnosis of Pulmonary Emholism, JAMA 202:567-570, 1967
5. Glazier, R L and Crowell, E B Randomized Prospective Trial of Continuous vs Intermittent Heparin Therapy, JAMA 236:1365-1367, 1976
6. Salzman, E W ; Deykin, D ; Shapiro, R M , et al Management of Heparin Therapy: Controlled Prospective Trial, N Engl J Med 292:1046-1050, 1975
7. Walker, A M and Jick, H Predictors of Bleeding During Heparin Therapy, JAMA 244:1209-1212, 1980
8. Hull, R D , Hirsh, J ; Carter, C J , et al Pulmonary Angiography, Ventilation Lung Scanning, and Venography for Clinically Suspected Pulmonary Embolism with Abnormal Perfusion Lung Scan, Ann Intern Med 98:891-899, 1983
9. Cheely, R ; McCartney, W H , Perry, J R , et al. Role of Noninvasive Tests versus Pulmonary Angiography in Diagnosis of Pulmonary Embolism, Am J Med 70:17-22, 1981
10. Wilson, J E. 3d, Bynum, L J., and Parkey, R W Heparin Therapy in Venous Thromboembolism, Am. J. Med 70:808-816, 1981
11. McNeil, B J.: Diagnostic Strategy Using Ventilation-Perfusion Studies in Patients Suspect for Pulmonary Embolism, J Nucl Med 17:613-616, 1976
12. Biello, D R ; Mattar, A G.; McKnight, R C., et al Ventilation-Perfusion Studies in Suspected Pulmonary Embolism, AJR 133:1033-1037, 1979
13. Alderson, P O., Rujanavech, N.; Secker-Walker, R H , et al: Role of ^{133}Xe Ventilation Studies in Scintigraphic Detection of Pulmonary Embolism, Radiology 120:633-640, 1976.
14. Kipper, M S ; Moser, K M ; Kortman, K E , and Ashburn, W L Longterm Follow-up of Patients with Suspected Pulmonary Embolism and Normal Lung Scan Perfusion Scans in Embolic Suspects, Chest 82:411-415, 1982
15. Spies, W.G.; Spies, S M and Mintzer, R.A Radionuclide Imaging in Diseases of Chest (Part 1), Chest 83:122-127, 1983
16. Secker-Walker, R.H On Purple Emperors, Pulmonary Emholism, and Venous Thrombosis, Ann Intern. Med 98:1006-1008, 1983.
17. Bell, W R and Simon, T.L. Comparative Analysis of Pulmonary Perfusion Scans with Pulmonary Angiograms From National Cooperative Study, Am Heart J 92:700-706, 1976.
18. McNeil, B J Ventilation-Perfusion Studies and Diagnosis of Pulmonary Embolism: Concise Communication, J. Nucl. Med. 21:319-323, 1980.
19. Spies, W G.; Spies, S M , and Mintzer, R A Radionuclide Imaging in Diseases of Chest (Part 2), Chest 83:250-255, 1983
20. Li, D R ; Seltzer, S E , and McNeil, B J V/Q Mismatches Unassociated with Pulmonary Embolism. Case Report and Review of Literature, J Nucl Med 19:1331-1333, 1978
21. Novelline, R A , Baltarowich, O H ; Athanasoulis, C A , et al: Clinical Course of Patients with Suspected Pulmonary Embolism and Negative Pulmonary Arteriogram, Radiology 126:561-567, 1978
22. Mills, S R., Jackson, D C , Older, R A , et al Incidence, Etiologies and Avoidance of Complications of Pulmonary Angiography in Large Series, Radiology 136:295-299, 1980
23. Dalen, J E., Brooks, H L , Johnson, L W , et al: Pulmonary Angiography in Acute Pulmonary Embolism: Indications, Techniques, and Results in 367 Patients, Am Heart J 81:175-185, 1971
24. Barritt, D.W and Jordan, S.C : Anticoagulant Drugs in Treatment of Pulmonary Embolism: Controlled Trial, Lancet 1:1309-1312, 1970
25. Alpert, J S., Smith, R , Carlson, J., et al: Mortality in Patients Treated for Pulmonary Embolism, JAMA 236:1477-1480, 1976
26. Tibbutt, D A ; Davies, J A ; Anderson, J A , et al Comparison by Controlled Clinical Trial of Streptokinase and Heparin in Treatment of Life-Threatening Pulmonary Embolism, Br Med J 1:343-347, 1974
27. Ly, B , Arnesen, H , Eie, H , et al Controlled Clinical Trial of Streptokinase and Heparin in Treatment of Major Pulmonary Embolism, Acta Med Scan. 203:465-470, 1978
28. Sharma, G V , Burleson, V A , and Sasabara, A A Effect of Thrombolytic Therapy on Pulmonary-Capillary Blood Volume in Patients with Pulmonary Embolism, N Engl J. Med 303:842-845, 1980.
29. Riedel, M., Stanek, V , Widimsky, J , et al. Longterm Follow-up of Patients with Pulmonary Thromboembolism Late Prognosis and Evolution of Hemodynamic and Respiratory Data, Chest 81:151-158, 1982
30. Hall, R J., Sutton, G C , and Kerr, I H Long-term Prognosis of Treated Acute Massive Pulmonary Embolism, Br Heart J 39:1128-1134, 1977
31. Sutton, G.C , Hall, R.J., and Kerr, I H Clinical Course and Late Prognosis of Treated Subacute Massive, Acute Minor, and Chronic Pulmonary Thromhoembolism, Br. Heart J 39:1135-1142, 1977
32. Sharma, G.A ; Cella, G , Parisi, A F , et al. Thrombolytic Therapy. N Engl. J. Med. 306:1268-1276, 1982.
33. Sherry, S ; Bell, W R , Duckert, F.H., et al Thromholytic Therapy in Thromhosis. National Institutes of Health Concensus Development Conference, Ann Intern Med 93:141-144, 1980
34. Sasahara, A A.; Sharma, G V , Tow, D E , et al. Clinical Use of Thrombolytic Agents in Venous Thromboemholism, Arch. Intern. Med. 142:684-688, 1982
35. Marder, V.J Use of Thrombolytic Agents: Choice of Patient, Drug Administration, Laboratory Monitoring, Ann. Intern. Med. 90:802-808, 1979.
36. Bell, W R. and Meek, A G : Guidelines for Use of Thromholytic Agents, N Engl. J. Med. 301:1266-1270, 1979.
37. Moser, K.M and Fedullo, P F Venous Thromboembolism Three Simple Decisions (Part 2), Chest 83:256-260, 1983.
38. Stein, P D and Willis, P W : Diagnosis, Prophylaxis and Treatment of Acute Pulmonary Embolism, Arch. Intern Med. 143:991-994, 1983

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Evaluation of surgical treatment of mitral valve disease with emphasis on prognosis based on etiopathology

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ABSTRACT: Clinical records of 150 consecutive patients were reviewed who had surgery for mitral valve disease between January 1974 and May 1981. The mean age was 57 years. There were 98 females and 52 males. All patients except 4 were in New York Heart Association functional Class III or IV. Forty percent were in regular sinus rhythm and 59% in atrial fibrillation. Clinical, hemodynamic and pathological findings confirmed rheumatic mitral valve disease in 67%, fibrotic and degenerative disease in 27%, prosthetic malfunction in 3.3%, and acute papillary muscle dysfunction in 2.6%. One third of the patients had coronary artery disease and 13% had electrocardiographic evidence of an old myocardial infarction. Twenty-six patients had open mitral commissurotomy, 119 valve replacement and five valvuloplasty. The most frequent concomitant procedures included coronary artery bypass grafting (32%) and aortic valve replacement (12%). Hospital mortality was 10%. Operative mortality was higher in patients with mitral valve disease associated with left ventricular dysfunction and/or coronary artery disease. The late mortality was 12.6% with a mean follow-up of 30.4 months. Only one death was related to the type of prosthesis (a thrombosed disc valve). Long-term prognosis was most favorable in patients with rheumatic mitral valve disease with well preserved left ventricular function. Anticoagulation morbidity was 3% and incidence of thromboembolism 3.7%. Rheumatic mitral valve disease is still the most common form of mitral valve disease in patients coming to surgery. These data emphasize that surgical treatment of mitral valve disease can be carried out with acceptable mortality and that available procedures and protheses are highly satisfactory.

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Since the earliest description of mitral stenosis by Vieusens in 1715 and Corvisart in 1806,[1] surgery for mitral valve disease has fully evolved save an ideal mitral prosthesis.[1, 2] Procedures ranging from closed mitral commissurotomy to open surgical methods to preserve the natural mitral valve have been established.[3-15] Onset of atrial fibrillation with systemic arterial embolization continues to cause major complications.[16-21] Rheumatic mitral stenosis and mitral insufficiency secondary to degenerative, rheumatic and coronary artery disease constitute the major disease process in patients referred for mitral valve surgery.[3-15] We have reviewed and analyzed our results with surgical treatment of this very important valvular heart disease with emphasis on prognosis based on etiopathology.

Materials and methods • The clinical records of 150 consecutive patients who underwent mitral valve surgery between January 1974 and May 1981 were reviewed. There were 98 females and 52 males with a mean age of 57 years (range 21-86 years). One hundred forty-six patients were in New York Heart Association Class III or IV; four patients had surgery because of recurrent systemic arterial embolization. Cardiac enlargement by conventional chest radiograph was present in 132 patients (88%) and echocardiographic enlargement of the left atrium was diagnosed in 114 patients (76%) (Table 1). Sixty patients (40%) were in regular sinus rhythm, 88 (59%) in atrial fibrillation and two had pacer rhythm (Table 2). Sixteen patients had documented systemic arterial embolization; 11 had previous mitral commissurotomy. Hemodynamic compromise was confirmed by cardiac catheterization in 147 patients (Table 3). Cardiac catheterization data revealed that 54 (35%) had mitral stenosis (one prosthetic valve stenosis) and 69

Table 1.—Clinical Data.

Age	Youngest	21 years
	Oldest	86 years
	Mean	57.7
Sex	Females-98	65%
	Males -52	35%
Functional Pre-Op Class (N.Y.H.A.)	Class II	4
	Class III	93
	Class IV	53
Chest x-ray	Normal heart size-18	12%
	Cardiac enlargement-132	88%
Echocardiogram	Left atrial enlargement-114	76%
	Left atrium normal range-6	4%

N.Y.H.A. (New York Heart Association Classification)

Table 2.—Clinical Data Electrocardiogram Analysis.

		Percent
Sinus Rhythm	60 pts	40
Atrial Fibrillation	88 pts.	59
Pacer Rhythm	2 pts.	
Previous M.I.	19	13
Conduction Defect	29	19
Atrial Abnormality	30	20
R.V.H.	23	15
L.V.H.	52	35

M.I. Myocardial infarction
R.V.H. Right ventricular hypertrophy
L.V.H Left ventricular hypertrophy

(46%) mitral insufficiency (24 rheumatic, 39 degenerative and fibrotic, four acute papillary muscle dysfunction and two periprosthetic leak).

Twenty-seven patients had mixed rheumatic mitral valve disease. Further analysis of etiology of mitral regurgitation revealed that 15 patients had pure myxomatous degeneration of the mitral valve, 15 had myxomatous mitral valve disease associated with coronary artery disease and 11 coronary artery disease and also documented old myocardial infarction. Twenty-eight patients had pulmonary artery pressure $\geq$ 50 mm. Hg. Associated valvular lesion included tricuspid insufficiency in eight patients and aortic valve disease in 41. Coronary artery disease was present in 59 (39%) (Table 4). Open mitral commissurotomy was carried out in 26 patients, valve replacement in 119 and annuloplasty in five. The approach to the mitral valve was through the transverse sinus in 146 patients. A total of 48 patients had concomitant myocardial revascularization. Other procedures included aortic valve replacement in 18, left ventricular aneurysm resection in four, and closure of an atrial septal defect in two. Left atrial thrombus was removed in 21 patients. Beginning in 1978 cardioplegia was used routinely in addition to topical cooling and systemic hypothermia.

Table 3.—Hemodynamics.

Cardiac Index	Mean	2.46 ± 0.73
	Lowest	1.1
Pulmonary Artery Pressure After Dye (145 pts.)	Mean	37.4 ± 17.0
	Highest	104
	For 28 pts	$\geq$ 50
Mitral Valve Gradient (42 pts.)	Mean	16.6 ± 8.4
(Pure mitral stenosis)	Highest	39
Mitral Valve Area (46 pts.)	Mean	1.1 ± 0.4
(Pure mitral stenosis)	Lowest	0.3
Associated Aortic Valve Disease		
Aortic Stenosis	3 pts.	
Aortic Insufficiency (1-4 +)	27	18%
Mixed Aortic Valve Disease	11	7%
Tricuspid Insufficiency (moderate)	8	5%
Associated Coronary Artery Disease	59	39%

Table 4.—Operative Data.

		Percent
Open Mitral Commissuorotomy	26	17
Valve Replacement	119	79
Starr-Edwards	37	
Bjork-Shiley	22	
Lillehei-Kaster	18	
Xenograft	42	
Valvuloplasty	5	
Concomitant Coronary Bypass	48	32
Aortic Valve Replacement	18	12
Resection of Left Ventricular Aneurysm	4	
Closure of Atrial Septal Defect	2	
Pacemaker Implant	6	
Removal of Left Atrial Thrombus	21	14

Table 5.—Causes of In-Hospital Deaths.

	Number Patients
1. Left ventricular failure	7
2. Arrhythmia	4
3. Atrioventricular groove rupture	2
4. Renal failure	1
5. Respiratory insufficiency	2
	15 (10%)

Results and follow-up • Fifteen patients (10%) died postoperatively, the most frequent cause being left ventricular failure (seven patients). Two patients died due to rupture of the atrioventricular groove (Table 5). Critical analysis of early mortality based on etiology revealed that five patients had rheumatic mitral stenosis, three rheumatic mitral insufficiency and seven mitral valve insufficiency associated with coronary artery disease and/or an old myocardial infarction. Postoperative complications are listed in Table 6. Significant morbidity included cardiac arrhythmia, low cardiac output syndrome and renal failure. Arrhythmia predominantly included atrial flutter and fibrillation. Long-term follow-up was available for the remaining 135 survivors (range three to 91.5 months, mean 30.4 months). All patients improved by at least one functional class except for one who remained in functional Class III. Of the patients who were in Class IV preoperatively, 16 were in Class I and 28 in Class II postoperatively, indicating significant improvement (Fig. 1). Anticoagulation with sodium warfarin was used in all patients with mechanical prosthesis, large left atria and atrial fibrillation with any mitral prosthesis, or with a history of arterial embolization or presence of left atrial thrombus. At the time of this study 111 patients were on anticoagulants. Four patients had suffered from major bleeding necessitating cessation of anticoagulants. Major thromboembolization had occurred in five patients (3.7%) despite anticoagulation therapy. Two patients have required tricuspid

Table 7.—Causes of Late Mortality.
Mean 15.8 months

			Months
1	Congestive heart failure	4 pts.	4-6
2.	Sudden cardiac arrhythmia	3	1-10
3.	Renal failure	1	4
4.	Cancer	1	8
5.	Sepsis (endocarditis)	1	6
6.	Myocardial infarction	1	1
7.	Pulmonary embolus	1	1
8.	Periprosthetic leak	1	8
9.	Thrombosed valve	1	32
10	Unknown	3	72
		17	

Table 6.—Postoperative Complications.

	Number Patients
1. Atrial and ventricular arrhythmia	38
2. Low cardiac output	14
3. Transient renal failure	10
4. Respiratory insufficiency	7
5. Stroke	4
6. Reoperation for bleeding	3
7. Atrioventricular groove tear	3
8. Permanent pacemaker	3
9. Pneumonia	2
10. Late tamponade	1

valve replacement, one and three years respectively following mitral valve replacement. There were two late periprosthetic leaks and one thrombosed disc valve. There were 17 (12.6%) late deaths, only one was related to the mitral prosthesis (a thrombosed disc valve). The remaining causes are listed in Table 7. Critical analysis of late mortality based on etiology revealed that seven patients had rheumatic mitral stenosis and mixed mitral valve disease and ten had evidence of myocardial infarction and/or associated coronary artery disease. Congestive heart failure and arrhythmia accounted for seven late deaths.

Discussion • Analysis of our data indicates that rheumatic mitral valve disease is still the most common finding in patients referred for surgical therapy, followed by degenerative and fibrotic mitral valve disease. It has been our experience in analyzing this series that definitive diagnosis of myxomatous degenerative disease can only be ascertained if extensive myxoid degeneration is found in the excised mitral valve leaflet tissue. Again, coronary artery disease can be coexistent with degenerative as well as rheumatic mitral valve disease. We believe that mitral

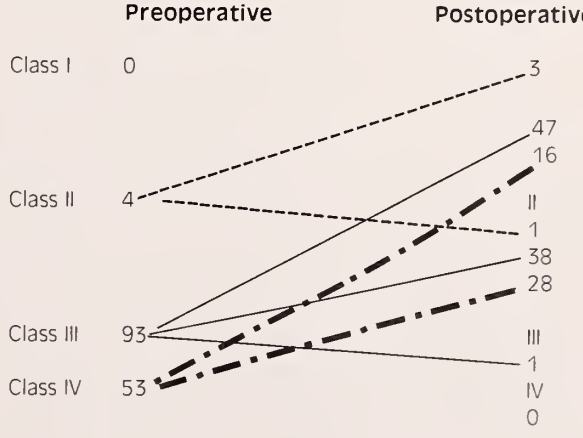


Figure 1.—New York Heart Association classification.

valve disease purely on the basis of coronary artery disease would show more atrophic and fibrotic changes in the excised mitral valve tissue rather than degeneration. Chaffin and Daggett in an analysis of 189 patients coming for mitral valve replacement report a similar incidence of rheumatic and degenerative mitral valve disease.[8]

Surgical treatment with open mitral commissurotomy, annuloplasty and valve replacement have been well established.[3-15] Younger patients with simple commissural fusion without gross fibrosis of the subvalvular apparatus are good candidates for mitral commissurotomy.[3-7] In our series of patients who had mitral commissurotomy none have required further mitral valve surgery (long term follow-up eight years). Severe calcific mitral stenosis and gross mitral regurgitation with or without chordae rupture have been treated by valve replacement. We have not made any attcmpts at plastic reconstruction of ruptured chordae tendinae. A selected few patients with moderate mitral regurgitation and well preserved large anterior leaflet of the mitral valve have undergone mitral annuloplasty (five patients). None have required further mitral valve surgery and there has been a marked clinical improvement.

The overall early mortality of 10% conforms to other large published series.[8-15] Critical analysis of our patients who died in the postoperative period on the basis of etiology has shown clearly that patients with mitral valve disease on the basis of coronary artery disease and/or previous myocardial infarction have a higher mortality compared with rheumatic mitral valve disease. The choice of mitral prosthesis is based on several factors including age, contraindication to anticoagulants, type of mitral lesion, size of the left ventricular cavity, reliability of the patient, and patient education. Our choice of prostheses for calcific mitral stenosis is a low profile disc valve unless otherwise contraindicated. Ball valve or bioprostheses are used as indicated in patients with mitral regurgitation. It is of interest to note that despite the large debate which still exists regarding the type of mitral prosthesis best suited for a particular patient, our operative mortality of 10% was not due to prosthetic dysfunction in any case (Table 6). Even while analyzing the causes of late mortality, there has been only one death related to late thrombosis of a disc valve; the patient had discontinued anticoagulants because of a bleeding duodenal ulcer. Cardiac arrhythmia, left ventricular dysfunction, coronary artery disease, and renal disease played a key role in early and late mortality. The late prognosis again is more favorable in patients with rheumatic mitral valve disease with well preserved left ventricular function as compared to mitral valve disease associated with coronary artery disease and in particular with left ventricular dysfunction. Drs. Chaffin and Daggett in their analysis of 189 patients who underwent mitral valve replacement found that the type of prosthesis did not affect the early mortality.[8] However, Dalby et al in reviewing their ten year experience with mitral valve replacement noted multiple variables which included the type of mitral prosthesis and the surgeons' experience.[9] Major bleeding secondary to anticoagulation was observed in four of our patients and in only one patient did cessation of anticoagulation result in valve thrombosis. Thromboembolism occurred in five patients (3.7%) without any major neurological deficit. Only one patient has had suspected prosthetic endocarditis resulting in death.

In summary, we have analyzed our surgical experience with 150 consecutive patients who had mitral valve surgery. Rheumatic mitral valve disease is still more prevalent than other etiologies, but with recent advances in echocardiography degenerative mitral valve disease is being recognized more frequently; one third of our patients also had associated coronary artery disease. Prognosis is most favorable in patients with rheumatic mitral valve disease and less favorable when associated with coronary artery disease and left ventricular dysfunction. Open mitral commissurotomy, valve replacement and annuloplasty were performed as indicated. Type of mitral valve prosthesis did not effect either early or late survival. A 10% hospital mortality for this entire group is similar to other large published series. Major bleeding secondary to anticoagulation has not been a significant problem and no major thromboembolism has resulted in death or major neurological disability. We believe that the surgical treatment of mitral valve disease can be carried out with acceptable mortality and that the available procedures and prostheses are highly satisfactory.

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References

1 Hayes, D M Evolution of Mitral Valve Surgery, Arch Int Med 102:659-668, 1958

2 Graham, G J , Taylor, J A , Ellis, L B , Greenberg, D J , and Robbins, S L Studies in Mitral Stenosis, Arch Int Med., 88 532-547, 1951

3 Gross, R J , Cunningham, J N , Jr , Snively, S L , Catinella, F P , Nathan I M., Adams, P X , and Spencer, F C Long-term Results of Open Radiac Mitral Commissuorotomy Ten Year Follow-Up Study of 202 Patients, Am J Card 47:821-834, 1981

4 Housman, L B., Bonchek, L., Lambert, L , Grunkemeier, G , and Starr, A Prognosis of Patients After Open Mitral Commissurotomy, J Thor CV Surg 73:742-745, 1977

5 Roberts, W C and Lachman, A S Mitral Valve Commissurotomy versus Replacement, Am Heart J 98:56-52, 1979

6 Fowler, N O and Bel-Hahn, J M Operations on Mitral Valve: Time for Weighing Issues, Am J Card 46:159-162, 1980.

7 Boncheck, L.I.: Indications for Surgery of Mitral Valve, Am. J Card 46:155-158, 1980
8 Chaffin, J S and Daggett, W.M Mitral Valve Replacement Nine-Year Follow-Up of Risks and Survivals, An Thor Surg 27:312-319, 1978.
9. Dalby, A J., Firth, B.G., and Forman, R. Preoperative Factors Affecting Outcome of Isolated Mitral Valve Replacement. 10 Year Review, Am. J Card. 47:826-833, 1981.
10. Gold, F L., Sharma, B ; Hodges, M , and Helseth, H.K Combined Left Ventricular Aneurysmectomy, Mitral Valve Replacement and Aortocoronary Bypass Grafting: Results of Surgery, Circ. 62 I-147-I-152, 1980.
11 Kay, J H , Zubiate, P ; Mendez, M , Carpena, C ; Watanabe, K , and Magidson, O. Mitral Valve Repair for Patients With Pure Mitral Insufficiency, JAMA 236:1584-1586, 1976
12 Ross, B A ; Fox, C.; Brown, A.H ; Peploe, W M., and Braimbridge, M V.: Late Results of Valvoplasty for Mitral Regurgitation Due to Rupture of Chordae of Posterior (Mural) Cusp, J. Thor CV Surg. 71:533-536, 1976.
13. Reed, G F , Pooley, R W , and Moggio, R.A.: Durability of Measured Mitral Annuloplasty-Seventeen-Year Study, J Thor CV Surg 79:321-325, 1980
14 Kay, J H ; Zubiate, P.; Mendez, A M., and Dunne, F.F : Myocardial Revascularization and Mitral Repair or Replacement for Mitral Insufficiency Due to Coronary Artery Disease, Cir S4 III-84-III-96, 1976
15 Najafi, H ; Javid, H ; Hunter, J.A , Goldin, M D ; Serry, C., and Dye, W S : Mitral Insufficiency Secondary to Coronary Heart Disease, Ann Thor. Surg 20:529-537, 1975
16. Aberg, H . Atrial Fibrillation, I Study of Atrial Thrombosis and Systemic Embolism in Necropsy Material, Acta Med. Scand 185:373-379, 1969
17 Pelletier, C , Bizri, S., Cossette, R ; Dontigny, L., and Levy, R.: Left Atrial Thrombosis Complicating Mitral Stenosis: Results Of Surgical Treatment, Canad. J Surg. 20:101-106, 1977.
18 Coulshed, N ; Epstein, E.J., McKendrick, C S.; Galloway, R W , and Walker, E Systemic Embolism in Mitral Valve Disease, Brit Heart J. 32:26-34, 1970.
19. Ullal, S R , Kluge, T H ; Hill, I D.; Kerth, W J , and Gerbode, F.: Left Atrial Thrombi in Mitral Valve Disease, J Thor CV Surg. 62:932-937, 1971
20 Darling, R C.; Austen, W G , and Linton, R R.: Arterial Embolism, Surg Gyn. Obst 124 106-114, 1968
21 Hinton, R C , Kistler, J P.; Fallon, J T.; Friedlich, A.L., and Fisher, C.M.: Influence of Etiology of Atrial Fibrillation on Incidence of Systemic Embolism, Am. J Card. 40 509-513, 1977

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Ultrasonic diagnosis of ovarian teratomas

Irving Waldman, M.D. and Joel Schneider, M.D.

ABSTRACT: Typical ultrasonic criteria of ovarian teratomas are described, and when present suggest the correct diagnosis. We evaluated the types and frequency of the most helpful sonographic findings of 37 tumors in 33 patients. Correct diagnoses could be suspected in approximately 50%.

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Teratomas of the ovary are sometimes incidentally found on radiographic examination of young women in the childbearing age. A specific "tissue" diagnosis is suggested when abdominal examinations show a round or oval lucent mass in the pelvis, especially if associated with teeth or calcifications.

Ultrasonic criteria of ovarian teratomas exist also. These include a number of features considered characteristic when present such as axial location cephalad to the urinary bladder,[1,2] solid mural component, acoustic shadowing,[3] and fluid or hair-fluid levels.[4]

We have examined 33 patients with 37 teratomas (four bilateral tumors) proved by surgery or with "classical radiographic" features of teratoma and have evaluated the frequency of the characteristic sonographic findings.

Materials and methods • Ultrasound examinations were performed on 33 patients ranging in age from 18 to 86 years with 27 under 40 years of age. All were referred with a clinical diagnosis of pelvic mass. The ultrasound examination considered the size, shape, consistency and location of the mass as well as the presence of acoustical shadowing. All examinations were performed with a commercially available gray scale contact scanner (2.25 or 3.5 MHZ) using a 13 mm diameter internally focused transducer or a 3.5 MHZ real-time unit. All patients were scanned in multiple planes with a partially filled or filled urinary bladder, as was deemed necessary.

Results • The masses defined sonographically ranged in size from 3 to 15 cm with half in the 6-8 cm range. In four of 33 patients the tumors were bilateral (Fig. 1). Almost all the masses were round or oval and five

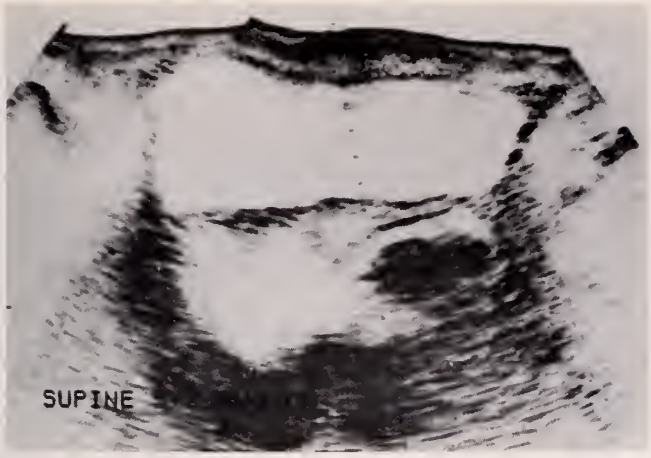


Fig. 1. — Rightsided mass in this patient with bilateral pelvic masses is anechoic. The left mass has a highly echogenic complex center.



Fig. 2. — Complex, oval, cystic mass with a dependent shadowing focus.

were multiloculated. The consistency was characterized as either cystic, complex or echogenic. Five of the 37 tumors were basically cystic but only three of these were absolutely anechoic (one had an echogenic adjacent shadowing focus).

Eight of the 37 presented as complex masses, indistinguishable from other similar complex masses except that two had some internal shadowing foci (Fig. 2). Fifteen, or almost half, presented as highly echogenic masses (Figs. 3A, 3B) of which five exhibited acoustic attenuation or shadowing (Fig. 4). In five patients no masses were detected sonographically and one of the patients with bilateral tumors had only a single mass.

The position of the tumors was variable and only six of 37 were in a midline location, although this had been described as a characteristic of dermoid tumors.[2]

Discussion • Dermoid tumors account for approximately 10% to 15% of benign ovarian masses. They have elements of all primitive body tissues including endoderm, ectoderm and mesoderm. Bilaterality is said to occur pathologically in from 2% to 15%.[5]

The clinical symptoms of teratoma are similar to other ovarian neoplasms. The incidence of torsion of a tumor on a pedicle is reported to be somewhat





Figs 3A and 3B — Homogeneously echoic, oval pelvic mass in transverse and sagittal views.

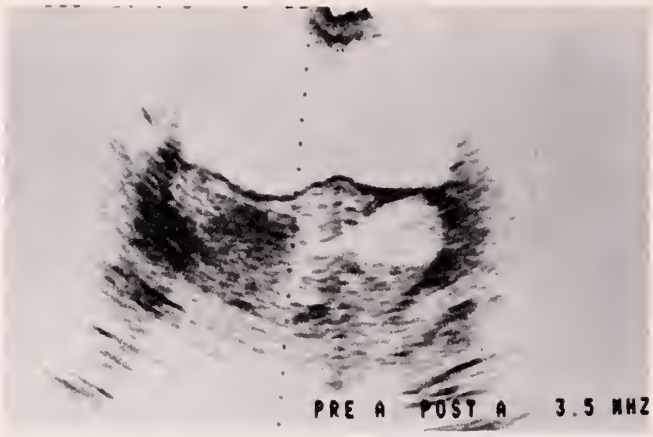


Fig. 4. — Right pelvic mass is densely echoic and shows shadowing.

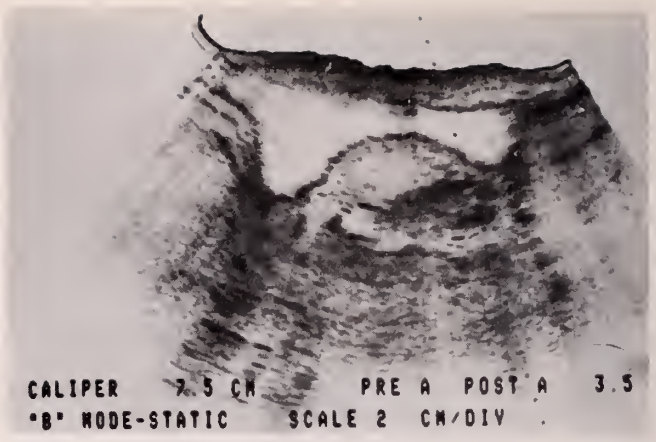


Fig. 5. — No definite mass seen on sonogram in patient with a definite clinically palpable mass.

higher than other ovarian neoplasms.[5] Only one of our 33 patients presented symptoms and signs of an acute abdomen.

The ultrasonic descriptions of dermoids and categories of sonographic findings have been previously described.[6] The sonolucency observed is due to liquified sebaceous material which may also layer and cause a fluid-fluid level. Some highly reflective material is often present due to hair and can cause a hair-fluid level or if particularly echoic, it may obscure the back wall of the tumor mass attenuating the ultrasound beam. This marked acoustic shadowing accounts for the so-called "tip of the iceberg sign" of Guttman[3] (Fig. 2). Less common causes of highly reflective echoes are teeth or bone.

Ultrasound findings of an echoic mass in a pelvic location occurred in 16 of 33 patients. Five of these had strong acoustic shadowing of the type usually associated with the "tip of the iceberg" sign. In 12 patients out of 33, a mass was clinically suspected and confirmed sonographically as cystic or complex. A tissue specific diagnosis was not possible in this category but in three of these patients strong acoustic shadowing in a small focus was present. In five patients a mass was not seen on the sonogram and in one patient one tumor of bilateral ovarian masses was not detected sonographically. It, therefore, seems reasonable in patients with a clinically definite mass and a normal sonogram (Fig. 5) that a single pelvic radiograph be obtained. In approximately 13% of our patients, tumors were undetected sonographically in spite of clinically apparent masses. The most consistently reliable finding of a teratoma of the ovary in our study proved to be an echogenic mass. Presence of acoustical shadowing added even stronger evidence. Cystic or complex masses which contained shadowing occurred infrequently but often enough to encourage the diagnosis of teratoma.

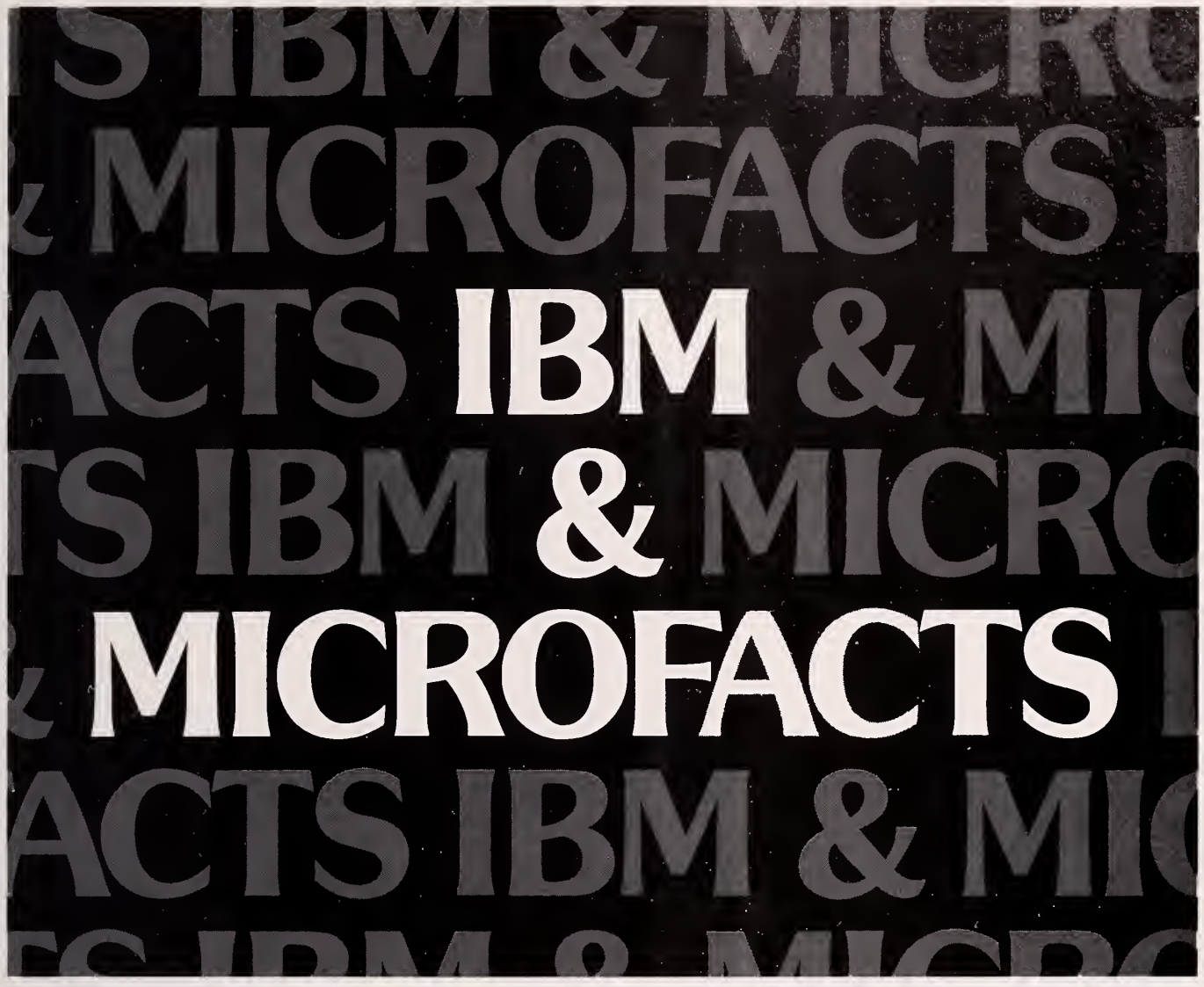
Because of the possibility of a "negative" sonogram in a patient with a clinically palpable mass, a single pelvic radiograph is suggested when a clinical mass is present without confirmatory sonographic findings.

Conclusion • Ultrasonography suggested specific diagnoses in more than a half of 33 patients with proven ovarian teratomas. It is, therefore, believed to be a reliable, often tissue-specific diagnostic tool in evaluation of pelvic tumors.

References

1 Sanders, C. and James, A.: Ultrasonography in Obstetrics and Gynecology, New York, Appleton Century Croft, 1977, p. 348.
2 Cochrane, W.J.: Ultrasound and Gynecology, Radiological Clinics of North America 13:457-466, 1975.
3 Guttman, P.H.: In Search of Elusive Benign Cystic Ovarian Teratoma: Application of Ultrasound "Tip of the Iceberg" Sign, JCU 5:403-406, 1977.
4 Gottesfeld, K.R.: Role of Ultrasound in Gynecologic Diagnoses, In Clinics and Diagnostic Ultrasound 2:207-227, 1979.
5. Anderson, W.A.D.: Pathology, 2nd Edition, C.V. Morsby Co., 1965, pp. 1060-1061.
6. Sandler, M., Silver, T., and Karo, J.: Ultrasonic Features of Ovarian Teratoma, RAD 131:705-709, 1979.

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SPECIAL ARTICLE

Hypnosis: a viable option in chronic pain management

Charles B. Mutter, M.D. and Aaron Karnilow, Ph.D.

Some of the most common complaints by patients to the doctors involve pain. Few symptoms cause as much suffering, disability and financial loss. Statistical surveys indicate that as many as one in three Americans experience pain; half of them take anywhere from one to five drugs, approximately 40% abuse drugs and 25% eventually become addicted. Although many patients are concerned about becoming addicted, they usually are unwilling to live without the relief provided by medication.

Pain is a personal, subjective experience with cognitive and affective components that can be influenced by significant others in the patient's environment. It is a process and not a static phenomenon. It is nature's warning system that signals when something is wrong with our bodies. Acute pain is a temporary, reversible process whereas chronic pain is protracted and usually irreversible.

Often times the chronic pain patient understands his pain only in physical terms. He expects the traditional medical and surgical interventions and is disappointed when he does not get immediate results. The patient who experiences persistent pain over long periods tends to become depressed, angry and resentful. He loses his enthusiasm for life; his self esteem diminishes, and his dependency needs increase. Effective management often becomes a race against time to bring the pain under control before his lifestyle deteriorates completely.

Treatment of the chronic pain patient may take place in the offices of physicians and psychologists who have specialized training in pain management. Clinics utilizing a multidisciplinary approach have also been established. Various forms of treatment have evolved to ameliorate chronic pain syndromes, varying from the traditional western approach of chemotherapy, physiotherapy and use of transneurostimulators to the nonwestern forms utilizing acupuncture, yoga and transcendental meditation.

Hypnosis, an old tool in the art of medicine, has become increasingly popular in the treatment of chronic pain.

Hypnosis, an old tool in the art of medicine, has become increasingly popular in the treatment of chronic pain. It has virtually no contraindications or adverse side effects in the hands of a competent clinician. Treatment strategies may have these goals: (1) blocking awareness of pain through direct suggestions; (2) displacement — shifting the perceived pain from one large area to another smaller, less vulnerable area, and (3) reinterpretation — changing

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the meaning of pain, e.g., a throbbing headache is reinterpreted as the gentle rocking of a boat. Other hypnotic strategies may include amnesia, dissociation, denial and time distortion. An indirect technique such as relaxation can increase the threshold of pain by 30% to 40%.

Hypnotic intervention with the chronic pain patient produces several major benefits: (1) it enables the patient to alter his perception of pain, thus gaining greater mastery of his body; (2) it diminishes anxiety and depression, and (3) it enables the patient to become more functional and less dependent on others. These benefits enhance the patient's self esteem and tend to make his life more meaningful.

The skeptical patient must be presented with a plausible and acceptable explanation of his condition and the treatment involved and he must be willing to actively participate in therapy.

It is important to realize that hypnosis is not a panacea. The chronic pain patient may be extremely negativistic and self-destructive. His pain may be so debilitating that he sees himself as utterly helpless and hopeless. The skeptical patient must be presented with a plausible and acceptable explanation of his condition and the treatment involved and he must be willing to actively participate in therapy. It is important to explore his expectations at the onset and clarify any misconceptions. Many patients expect "instant improvement" or "magical cures". Failure to clarify these misconceptions will stress the doctor-patient relationship and may lead to premature termination of treatment.

The psychodynamics of the clinician plays an important role in the treatment of chronic pain. He is usually an understanding, empathetic individual who strives to alleviate suffering as quickly as possible but, his expectations are often frustrated, resulting in disappointment which inadvertently may be transmitted to the patient. When this disappointment is perceived by the patient, an aggravation of symptoms may result. It is essential, therefore, that the clinician have the awareness that treatment is a slow, prolonged process that is prone to exacerbations. Hypnosis provides a means for him to accelerate the treatment process and allows the patient to gain greater mastery of his pain.

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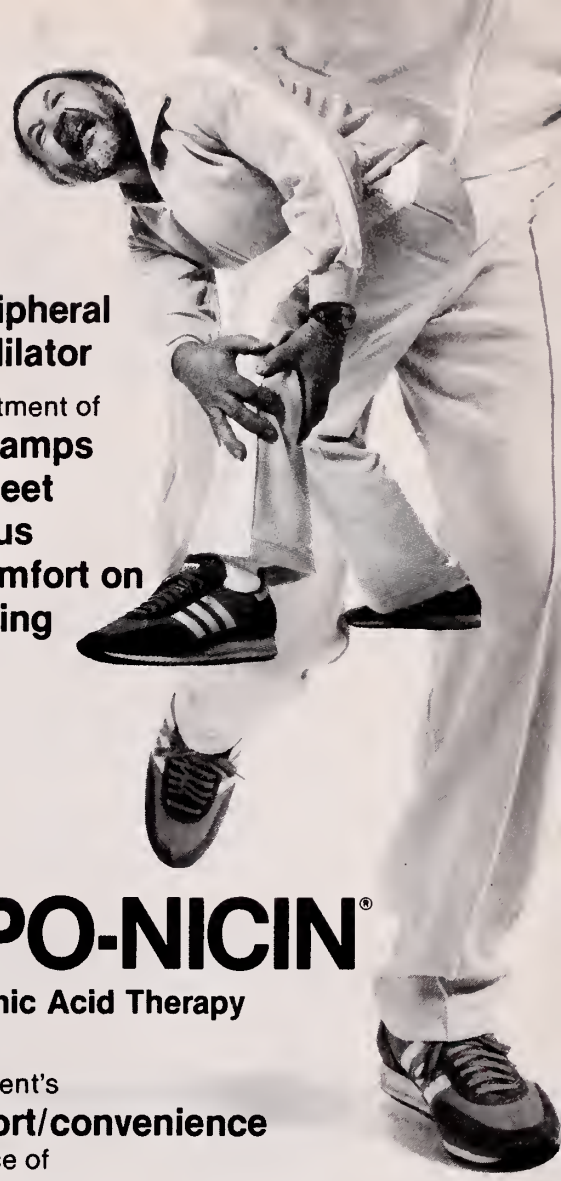
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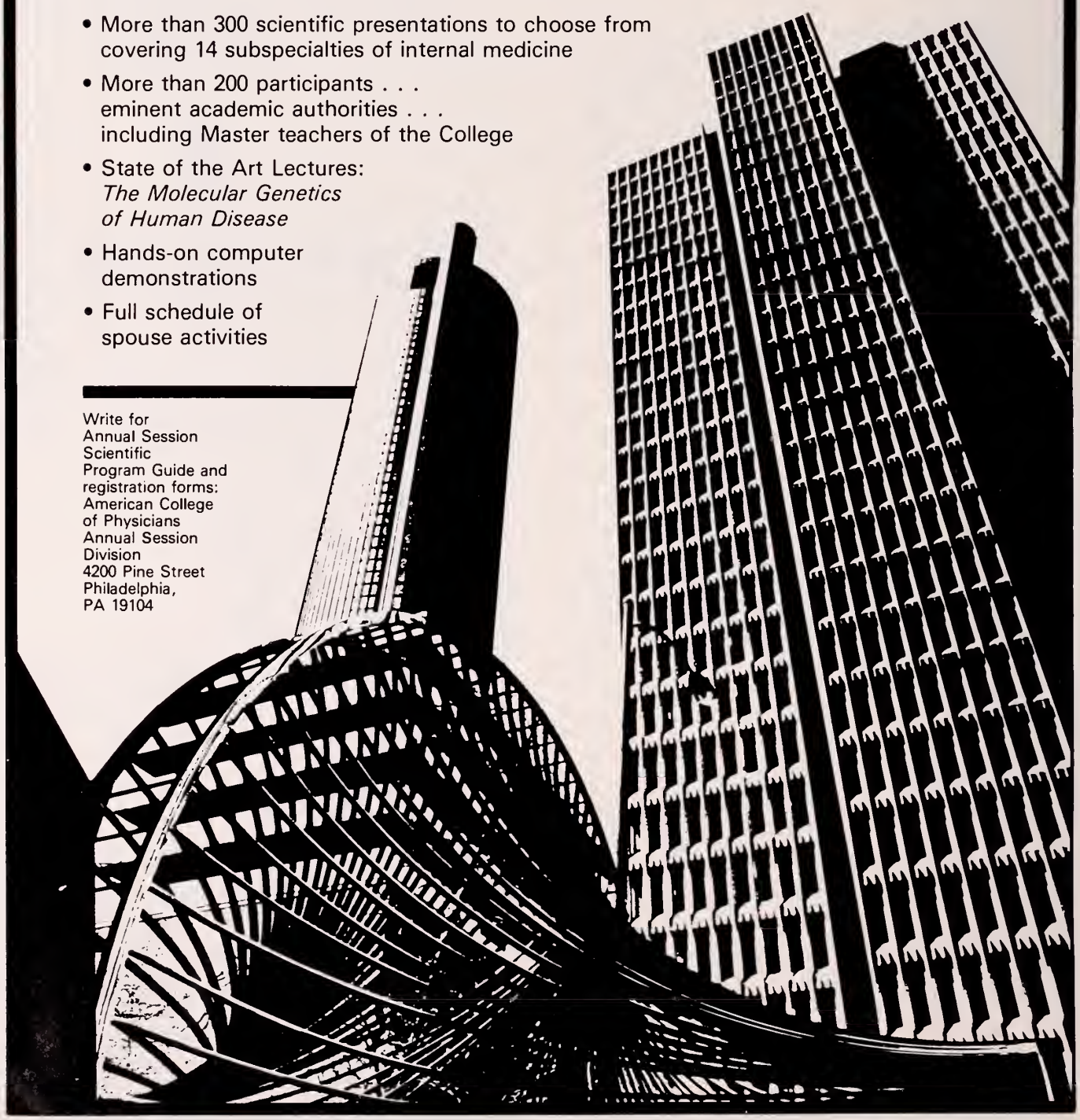
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Book Review Editor — **F. Norman Vickers, M.D.**

The fever man

By V.M. Sherlock, 152 Pages. Price $17.00. Medallion Press, 1982.

It is difficult for those of us accustomed to the luxury (now a "necessity") of air conditioning to imagine the quality of life along the Gulf Coast in the middle of the last century. The development of refrigeration and related technology occurred such a long time ago that probably few now are aware that a pioneer Florida physician was instrumental in bringing the known physical principles together into a workable demonstration model.

The story of Dr. John Gorrie of Apalachicola has recently been retold in what will very likely remain his definitive biography. It is a fascinating narrative. Even apart from his innnovative and wide ranging scientific interest, Dr. Gorrie was a remarkable man. An unusually well trained physician, he practiced for twenty-two years in what is rapidly becoming an international port. His civic duties as mayor, postmaster, justice of the peace, and public health officer were performed while he conducted an active medical practice until his death in 1855.

Vivian M. Sherlock, a former English teacher at Florida State University, has done a skillful job of marshalling the available skimmpy and disparate sources into a coherent and readable account. The author's extensive knowledge of Florida Gulf Coast history provides a vivid background to John Gorrie's personal story. Her diligent research and careful documentation has enabled her to achieve her goal of sifting through the body of legend surrounding Dr. Gorrie and arranging (in her words) ". . . the few remaining tangible facts into a narrative which would reveal his aims and put into proper perspective his contribution to human welfare."

The little coastal village of Apalachicola became a boom town shortly after the arrival in 1833 of this new medical doctor from Abbeville, South Carolina. It's location at the mouth of the river made it a natural transfer point for the growing cotton trade brought down on flat-bottomed steamers from Alabama and Georgia. With its newly dredged harbor, it bid fair at one time to rival Pensacola and Mobile as an international shipping center. The growing population, however, braved formidable hazards and uncertainties. To the threat of Indian raids and hurricanes was added in summertime the certain arrival of "the fevers". Although malaria may have been the most prevalent, yellow fever was by far the most devastating. A graphic description of the epidemic in 1841 tells of the ravages wrought by the "saffron devil" in Apalachicola and, even more severely, in its recently settled competitor, St. Joseph.

Along with most of his contemporaries, Dr. Gorrie recognized a relationship between the swampy coastal terrain, poor public sanitation, pestilential summer heat, and the development of various contagious fevers. He campaigned vigorously throughout his professional life for drainage of stagnant water and removal or decaying matter, but his efforts met with limited success. The largely unscientific fever remedies available probably shortened as many lives as they prolonged, and Gorrie must have been an honest enought observer to realize this. Following the dramatic break in fevers with the first arrival of fall weather in 1841, however, his suspicions regarding the beneficial effects of cool pure air were confirmed. Some time thereafter he began a series of experiments in a makeshift lab in his home which culminated several years later in a compressed air refrigerating machine capable of producing ice during even the hottest weather. Dr. Gorrie received patents from London and Washington on this device in 1850-51, and he immediately began extending the invention into a system for air conditioning entire

rooms. It appears that his motives were primarily humanitarian, and his dream of cooling his fever patients was pursued at considerable personal sacrifice.

Unfortunately, a series of setbacks encountered in the early 1850s prevented this obscure and improbable frontier visionary from achieving either commercial success or widespread professional acceptance of this theories. Although not destitute, he died without even receiving any royalties from his ice machine, or even being granted a patent for his air conditioning scheme. It was to be years later before the world began to appreciate the accomplishments and motives of Dr. Gorrie, and even today his name is scarcely noted in the standard texts of medical history. We are indebted to Vivian Sherlock for creating this authentic and engaging portrait.

Stuart H. Shippey Jr., M.D.

● Dr. Shippey is in private practice of surgery in Pensacola.

Computer tomography of the head and spine: a photographic color atlas of CT, gross and microscopic anatomy

By Schnitzlein, H.N.; Hartley, E.W., Murtagh, F.R., Grundy, L., and Fargher, J. 117 Pages illustrated. Price $59.00. Urban & Schwarzenberg, Baltimore-Munich, 1983.

Computed tomography (CT) has stimulated the production of a number of atlases correlating gross anatomic sections and CT scans. *Computed Tomography of the Head and Spine* is such an atlas, and it offers additional relevant microscopic anatomy.

The anatomic sections in color are of excellent technical quality with artifactual shrinkage of the brain from fixation serving to accentuate visualization of cisterns and sulci. Labels are clear and accurate. Correlative CT sections are also of good quality. The text features a limited synopsis of the anatomy visible on each section plus brief comments on function and disease states. Inclusion of the spine is a bonus not found in most other similar works.

The atlas will be a useful supplement to those learning neuroanatomy, clinical neurology, and CT neuroradiology. Medical students, neurology and neurosurgery residents, and radiology residents are most likely to benefit from its study.

The atlas will also be of use to those interpreting CT scans, serving as a reference for determining the anatomic location of the pathology seen. A limitation in this regard is the single plane of section used in the atlas for both brain and CT sections. A different atlas may be needed when the CT sections are in an alternative plane.

William R. Scott, M.D.

● Dr. Scott practices neuroradiology at the Medical Center Clinic in Pensacola, Florida. He was formerly an assistant professor of radiology at Stanford University.

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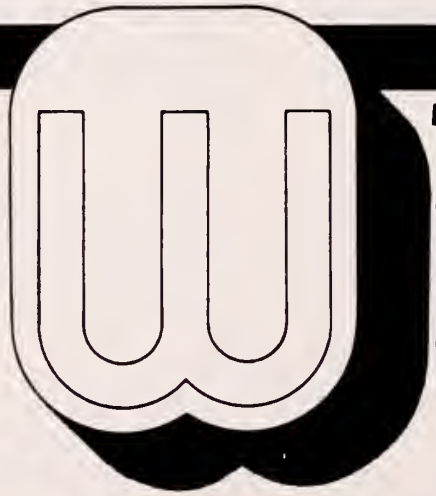
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Health projects new image

The Health Projects Committee of the Florida Medical Association Auxiliary has changed its image to conform with the AMA-A National Health Projects Committee. The state now has a coordinator of health projects whose job is to gather information and through this method serve the counties in a more efficient manner. Information will be gathered from the following state committees: Impaired Physician, Aging, Learning Disabilities, Parenting and Safety, Child Abuse, and Substance Abuse.

The new coordinator has started a statewide newsletter with the first issue having an emphasis on all the projects each county will be doing in the upcoming year. The second newsletter will include each county's special program, format and results to date. The final newsletter will discuss problems which to look for and avoid while implementing a county wide program.

Time has been scheduled at each state meeting for mini workshops in which the state chairman has an opportunity to discuss possiblities for programs that can be implemented on the county level. In addition, the county health projects chairmen can discuss their problems and obtain information about new projects. These workshops are an invaluable tool to keeping lines of communication open between the state and county chairmen.

At these workshops the use of the AMA-A Project Bank and People Bank is stressed. With the Project Bank catalogue suggesting projects, giving different formats, and supplying the number of persons needed to participate, no longer must the chairman wonder which project will fulfill the needs of the local community. Counties are encouraged to send their projects to the AMA-A Project Bank making them available for all to use. The People Bank started in June '83, an innovation of the AMA-A, was designed to make available to auxiliaries in need of speakers and resources the talents and abilities of qualified members.

A. Impaired Physician

Auxilians are being encouraged to develop workshops on the impaired physician using educational material supplied by state and national headquarters. Edie Epstein, state chairman and member of the Speaker's Bureau, is available to discuss this program at any auxiliary meeting.

Auxilians are raising money for the FMF (Florida Medical Foundation) Impaired Physician's Fund by donating directly, selling the Lee Adams print "Caduceus" and the second printing of the FMA-A cookbook "RX for Fine Dining".

B. Aging

Ann Swing, FMA-A Aging Chairman, says the problem of aging is one of our top priorities. Senior citizens should be considered one of our most valuable state assets. It is the goal of the FMA-A to provide an excellent service to the elderly and to reach this goal, it is necessary to have the combined efforts of every county auxiliary.

C. Learning Disabilities

Julie Benson, FMA-A Learning Disabilities Chairman, says we need to work closely with the community and schools. We can help by dispensing literature and visual aids and helping in the classroom with one-to-one assistance.

D. Parenting and Safety

Linda Wimbush, state chairman, request that county auxilians inform the public about the new law on usage of infant car seats.

E. Child Abuse

Bea George, state chairman, says auxilians should launch programs emphasizing community involvement in positive parenting education to help avoid child abuse.

F. Substance Abuse

Substance Abuse awareness should be promoted in the community according to Martha Cox, state chairman. Drunk driving is a major health concern. It is the number one killer of people in their teens and twenties. She urges legislative action to strengthen and enforce drunk driving laws.

With your help and assistance, our varied Health Projects programs will continually put the AMA-A and the FMA-A in the fore front of our communities. We will try to make Florida the best place to live.

Mrs. Jack (Terry) Carver
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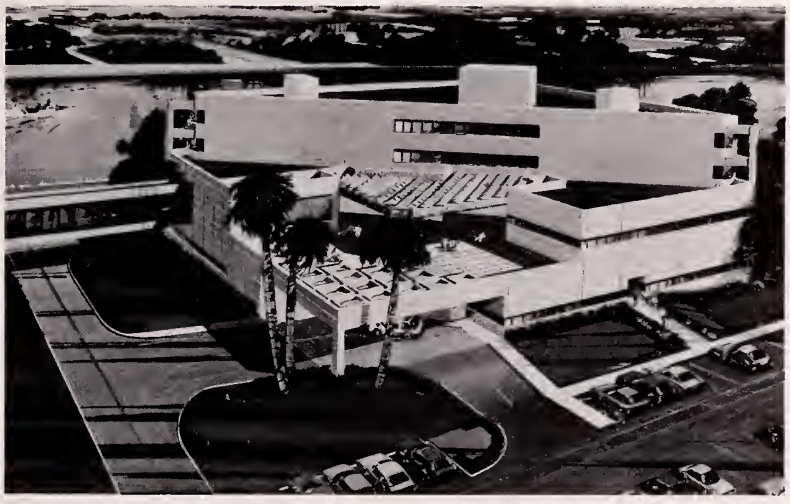
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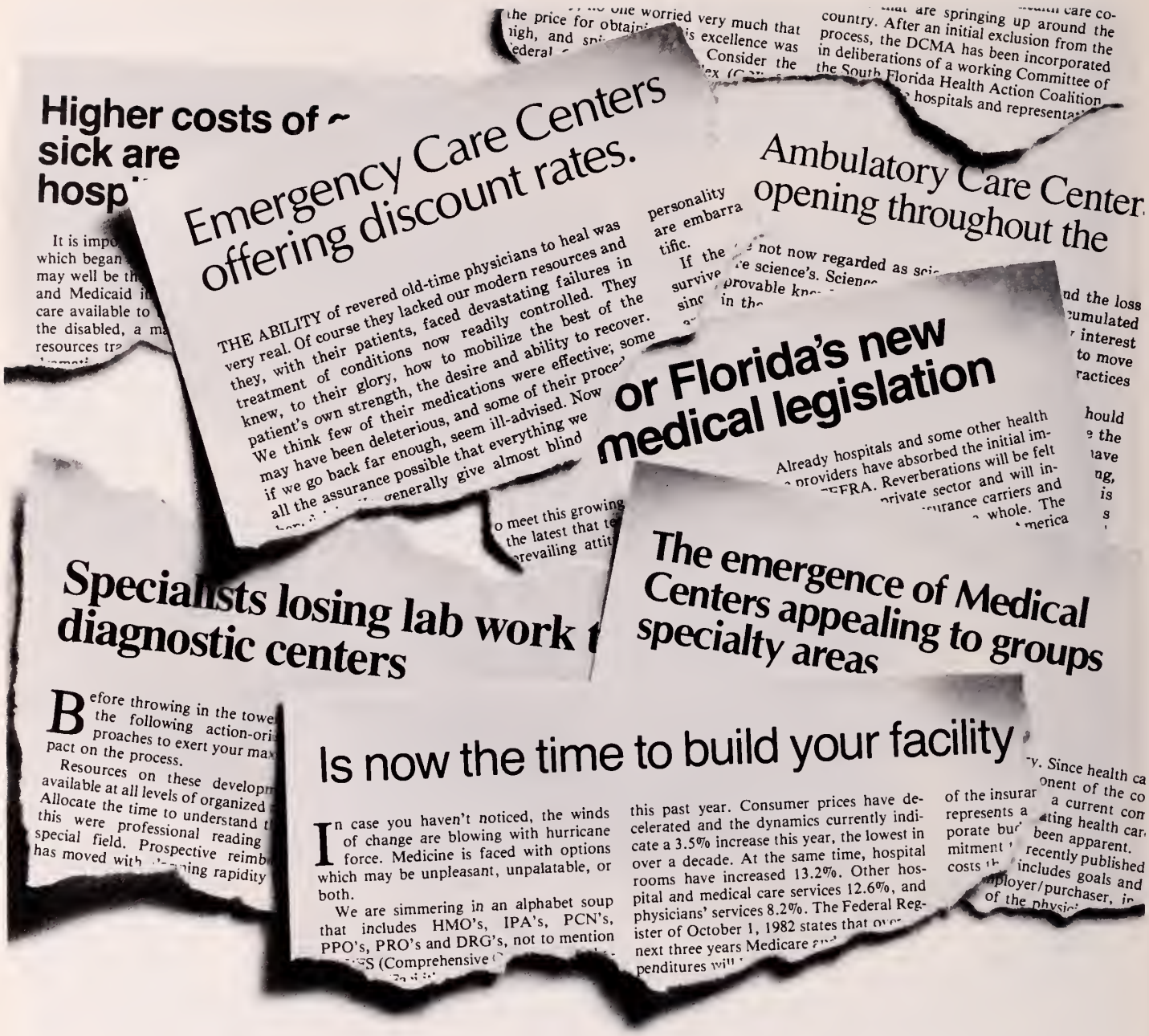
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For complete information, contact Tampa General Rehabilitation Center, Davis Islands, Tampa, Florida 33606. Telephone: (813) 251-7226.

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NOTES & NEWS

Dr. Lacsamana appointed to Assistant Editor

R.G. Lacsamana, M.D., a Daytona Beach internist, has been appointed Asistant Editor of *The Journal of the Florida Medical Association, Inc.* by action of the Board of Governors at its October meeting.

Dr. Lacsamana has served as Editor of the Volusia County Medical Society *Stethoscope* since 1980. Prior to his appointment as Assistant Editor, he served two years as Consulting Editor to *The Journal.*

New technique for diagnosing heart attacks developed at the Unversity of Florida

Three beats of the heart, scanned quickly by a computer, can help doctors diagnose heart attacks safely and cheaply — and save lives — using techniques being developed at the University of Florida.

Video tapes of the human heart, produced instantly by an echo device similar to sonar, are analyzed by computer to spot muscle damage, leaks and inflammation without surgery.

"It's a twist on computer graphics technology. Usually the computer crunches numbers into pictures," said Dr. Leslie Oliver, a computer science professor at UF. But Dr. Oliver and Dr. Edward Geiser, a cardiologist at the university's Health Center, are making a computer work in the other direction, turning pictures into data to uncover problems invisible to the eye.

In hard-to-diagnose cases, monitoring the thickness of the heart muscle could help save lives. If a part of the muscle fails to contract and thicken as the heart beats, doctors will know that part is scarred from earlier trauma. Damaged areas that are still pliable indicate recent damage — the patient, at that very moment, may be having a heart attack.

"If a heart attack can be diagnosed early enough, it may be reversed, and the heart will frequently recover within two weeks," Geiser said.

The equipment and computer programs they are developing can detect leaks between the two lower chambers of the heart. Leaks mean a poor oxygen supply for the endangered heart muscle itself and the body as a whole. The left and right ventricles build up considerable pressure as they pump blood, one to the lungs and the other to the rest of the body. If the blood leaks from one chamber to the other, it will not be properly oxygenated in the lungs.

Dr. Oliver's next step is to get the computer to measure, from the video tape, how much blood the heart is pumping. A three dimensional analysis that can compute the volume of the heart before and after contraction can show whether a recovering heart is getting stronger.

Measurements are averaged over three successive beats to help doctors keep track of inflammation or determine the effectiveness of a regimen of drugs as they monitor the heart from week to week, detecting changes in heart measurements as small as five percent, too small for the doctor to see.

The pictures Drs. Oliver and Geiser feed through their computer analysis are echocardiograms made by a 2-D echo machine, compact enough to fit onto a small cart that rolls to the patient's bedside. A built-in television screen shows the heart beating in "real time," so doctors can view the heart as it works. The apparatus can be used for frequent exams without health risks, and won't necessarily require a trip to the hospital.

Other methods exist for looking at the heart without surgery, but x-rays are limited for safety reasons, and techniques using nuclear magnetic resonance are more expensive. Unlike radioactive procedures, echo techniques require no special license for practitioners.

Of the available techniques for in-depth heart exams, Dr. Geiser said, "Echocardiograph analysis will be the safest and cheapest and will meet the needs of the largest number of patients."

Currently only 15 institutions in the country have the Quantic 1200 machine Drs. Geiser and Oliver are helping to develop for Bruce Franklin, Inc. Two-thirds are in research labs. But as the technology is refined, more hospitals and even smaller medical groups can benefit from the equipment, the researchers said.

USF awarded grant to combat children's communication disorders

A unique $3 million demonstration program to coordinate screening and treatment for hearing, speech, and language disorders in infants and young children was announced today by The Robert Wood Johnson Foundation.

Recipients of the four-year, $600,000 awards are the University of Colorado Health Sciences Center, the University of Iowa, the University of Medicine and Dentistry of New Jersey-Rutgers Medical School, Vanderbilt University of Medicine, and the University of South Florida School of Medicine.

In making the announcement, Foundation President Dr. David E. Rogers said: "Even though approximately 4.6 million children have disabilities in communicating — and nearly 75 percent of these children have hearing loss — current community-based approaches for communicative disorders are fragmented.

"This will be the first large-scale demonstration ever conducted to close this gap. It gives us the opportunity not only to help infants and preschoolers at risk for or afflicted by disorders, but also to stimulate primary care health professionals to better recognize communicative problems in their young patients."

A wide variety of effective methods are available for the detection of problems in infants and children which are responsible for communicative disorders. Methods are also available to intervene in ways which can prevent or remedy the disabilities associated with these disorders. As a rule, however, there is no coordinated system of care which links the detection of these problems by physicians and the implementation of effective interventions.

The five projects will vary in their specific approaches to working with communicative disorders, but they will have several aspects in common. Each project will put into place an organized program to train primary care physicians to recognize potential or existing communicative disorders in their very young patients. Second, a tracking and information system will be set up or expanded to assure continued follow-up. In all five projects, screening, referral, diagnosis, and follow-up will be performed for each patient.

In addition to the funded projects, the Foundation has granted $300,000 to Harvard University to study the magnitude of the problems of communicative disorders and their management at each of the five sites. This study will be conducted by Dr. Jerome Kagan, a leading developmental psychologist.

The Robert Wood Johnson Foundation became a national philanthropy in 1972, and has since made grants totaling more than $500 million to improve health care in the United States.

Saturday Evening Post offering award for best story on dietary fiber

Dr. Cory SerVaas, editor and publisher of *The Saturday Evening Post*, has announced a $5,000 cash award offered by the Benjamin Franklin Society for the story that best motivates people to add water-soluble and water-insoluble fiber to their diets.

Dr. SerVaas believes it is important for the public to understand that water-insoluble fiber, as found in wheat bran, is unsurpassed for eliminating constipation and avoiding diverticulosis or even cancer of the colon, but it does nothing for lowering the cholesterol level. Water-soluble fiber, as found in oats and beans, is needed to lower cholesterol, and it also lessens the amount of insulin some diabetics require — but does nothing for constipation. So people need both kinds, and they need them daily if they are to avoid many degenerative diseases suffered in our Western civilization.

The Society hopes to encourage many writers to do stories for their newspapers, magazines, house organs and church publications that will present the fiber story in depth, rather than superficially.

"It is important for everyone to know," states Dr. SerVaas, "that the quickest way to get both water-soluble and water-insoluble fiber into the diet is to mix oat bran with wheat bran and eat it every morning. But," added Dr. SerVaas, "since this is also a very boring routine for most people, we need to get many new wheat and oat bran and bean recipes presented so that high fiber dining can be every bit as appealing as the old-fashioned diet of refined carbohydrates."

Each submission will be judged by a panel of journalists and medical researchers for in-depth research, including recipes, interviews and health success stories from fiber-conscious people. The award-winning work will be published in *The Saturday Evening Post*.

Any article published between the dates of October 20, 1983, and July 1, 1984, will be considered. However, articles need not necessarily have been published to qualify.

Entries must be received by July 1, 1984, and should be submitted to: Cory SerVaas, M.D., Benjamin Franklin Society, 1100 Waterway Blvd., Indianapolis, Indiana 46202.

DEAN'S MESSAGE

Attending to the emotional problems of future physicians

As the number of students at the University of Miami School of Medicine grew, our awareness of the emotional problems that confront students became more apparent. In 1975 we hired a full-time psychiatrist to address the problem of the emotional health of medical students and an office of student mental health services was established. In the beginning, students were referred for help by the Associate Dean for Student Affairs. Initially, there was some student resistance to the idea of seeing a "school psychiatrist," because of the aspect of confidentiality. However, with time and experience, the students came to trust the psychiatrist and began to seek help by referral from other students who had previously availed themselves of these services.

The percentage of students turning to this service was slowly but steadily increased over the past eight years. Students are seen for evaluation, crisis intervention or brief therapy and are referred, as needed, for appropriate psychotherapy or psychoanalysis. The problems that are dealt with are quite varied and include the following: (1) concern over academic difficulty; (2) anxiety secondary to stress in school; (3) depression; (4) marital problems; (5) difficulty in interpersonal relationships; (6) sexual problems; (7) conflict with faculty and (8) serious mental illness — infrequently.

It is worth noting that, in general, medical students are still in an adolescent phase of human development with all the stress of that period. In addition, they are participating in one of the most rigorous educational experiences that exist. To some students, this combined stress not only creates emotional difficulties but, in addition, bring to the forefront underlying neurotic difficulties, including such problems as fear of success. For other students, dissecting a cadaver or drawing blood for the first time can create undue anxiety. Also, increasing responsibility for patient care is stressful to many students.

There are several times during medical school education that students tend to have more problems than other times. The most stressful for some students is prior to the first set of major examinations. Another time is before the National Board Part I Exam which is given at the end of the second year and is required for promotion to the third year. Stress is also evident during the fourth year when students select their specialty and location of postgraduate training.

This approach to meeting the needs of students with emotional problems has been well received and is very effective at our school. We have found that intervening at this early phase in the student's medical education not only helps the student alter maladaptive patterns for dealing with stress in medical school but helps prepare him/her for the emotional stresses of future practice. Also, it makes it easier for the practicing physician later in his career to seek psychiatric help, if the need arises. An additional side effect of the student obtaining help for his own personal problems is that the physician will be more attuned to the emotional needs of their patients, and less hesitant to referring his patients for psychiatric help. Needless to say, psychiatric intervention in medical school should reduce the number of "impaired" physicians in the future.

At our institution, we hope to expand the ready availability of psychiatric services to include house staff with problems similar to those of medical students. Obviously, there are some house staff who do not encounter problems as students but who develop problems during this later phase of training. We recognize the need to have a specific organizational component to deal with these physicians-in-training as well as sometime in the future.

Bernard J. Fogel, M.D.
Vice President for Medical Affairs and Dean, University of Miami School of Medicine

Frank E. Bishop, M.D.
Director
Student Mental Health Service
University of Miami School of Medicine

WORTH REPEATING

JCAH update, September1983

In the past year more physicians in America have become conscious of the Joint Commission on Accreditation of Hospitals (JCAH) than at any previous time in that organiztaion's 65-year history.

Increased awareness of the JCAH has resulted from the national discussion of a controversial proposal that would have revised its Medical Staff Standards by changing "medical staff" to "organized

staff." It was soon apparent that this proposal was intolerable to a vast number of American physicians because it would take away the primacy of the physician in caring for the acutely ill patient in hospital. So vigorous was the reaction among the profession, and so vehement the protest to the American Medical Association and the JCAH that the symbolic term "medical staff" was promptly reinstated.

It would be pleasant to think that this restitution of a critically descriptive label reflected a comparable restoration of the previous content of the medical staff standards. Unfortunately, this is not the case. The latest medical staff standards, circulating for comment over the past several weeks, allow limited-license practitioners to independently admit patients to the hospital. This is the precise issue over which indignation in the medical profession erupted, causing such vociferous complaints in early 1983 that the AMA, as reported in the April 8 *AMNews*, adopted as one "principle" a recommendation to "replace the term 'organized staff' with 'medical staff' throughout the document" of the medical staff standards. The AMA Board of Trustees also approved a plan for the JCAH staff ". . . with professional assistance, including attorneys" to draft new language for the medical staff standards.

That new language, embodied in the draft of August 17, 1983, specifies under Standard I a "single organized medical staff" that includes fully licensed physicians "and may include other licensed individuals permitted by law and by the hospital to provide patient care services independently in the hospital."

To learn the process for delineation of clinical privileges, one looks to Standard IV where the initial "required characteristic" under A. states that: "All individuals who are permitted by law and by the hospital to provide patient care services independently in the hospital have delineated clinical privileges, whether or not they are members of the medical staff."

Thus, the "medical staff" is open to non-physicians, and an individual may have clinical privileges, which are "hospital-specific," even if he is not on the medical staff. It seems clear that the JCAH staff and committee, "with professional assistance, including attorneys" have indeed drafted new language that accomplishes under the restored "medical staff" label the same unfortunate result that would have ensued under the more overt "organized staff" label. For all practical purposes, the situation has reverted to the status so widely objected to by the multiple resolutions in the June 1983 meeting of the AMA House of Delegates.

In ACS Newsletter No. 8 of June 13, 1983, the above points were made quite clear, as was the recognition of some legal risk with any king of standard-setting. Now we have a proposed set of standards that allows admission of patients to hospital by various kinds of limited-license practitioners, with the provision under Standard IV-C-1 that "when non-physician members of the medical staff are granted privileges to admit patients, provision is made for prompt medical evaluation by a qualified physician for all such patients." This is the thin and ill-defined shield that is presumed to preserve for patients in hospital the high standard of quality that has characterized the best of our hospital care over many decades.

I am personally convinced that the currently proposed version of the medical staff standards is the same compromise of principle dictated by legal expediency that was rejected by the profession in June of 1983. Now it is up to the profession to decide whether it wishes to stand its ground or to strike its flag in this critical struggle.

C. Rollins Hanlon, M.D.

Reprinted with permission from the *Bulletin of the American College of Surgeons*. October 1983, Vol. 68, No. 10.

Partnership — medical staff, board, administration

The changing structure of the health care system with the advent of a new payment mechanism by the federal government has most health care managers and providers concerned if not downright worried.

Some health care economists are predicting that hospitals and physicians are on a collision course under the new DRG System. While this may appear to be inevitable, it can be and must be avoided.

Under the DRG System, hospitals must control cost if they are to survive economically. Yet, physicians control the degree and amount of services provided to hospitalized patients. With the federal government paying a prospective rate based on DRG's, an economic dilemma has been created that can't help but intensify in time.

In order for the health care system to survive, hospitals and physicians must develop a more cooperative approach in the use of available resources. In fact, a true partnership must be forged between the governing board, administrative staff and medical staff. The "three-legged stool" theory of hospital

management (governing board, administrative staff, medical staff, working with independent roles), is no longer valid. To be honest, I am not sure that this was ever a very valid theory to begin with.

In order to develop a true partnership, physicians must be included in the decision-making process of the total hospital, including its major committees and the governing board. Therefore, physicians should be members of governing boards in order to be in the main-stream of the decision-making process. Physicians should be selected for board appointment in the same manner as other members of the board — primarily from the standpoint of their interest and dedication to the institution. They should not be there as a special interest group to represent the medical staff. They should be there to add their expertise in developing the policies, strategies and overall objectives of the hospital to assure that the hospital fulfills its mission and purpose.

The elected leadership of the medical staff — president or chief of staff, depending on the organizational structure, should be on the governing board as a non-voting ex-officio member. In this way, the elected leadership is able to represent the special interest of the organized medical staff and to guide the governing board in its deliberations.

Larger hospitals would do well to consider establishing the position of medical director or director of medical affairs to assist in forging a better partnership between the board, administration and medical staff. The carefully selected director or medical affairs is in a unique position to guide the medical staff and hospital through these troubled times.

Competition and the proliferation of alternative delivery systems will heighten the concerns for the medical staff as well as the hospital. Yet this too can be minimized with a better relationship and a better understanding on the part of both parties. The hospital governing board as well as administrative staff must realize and appreciate the concerns for the problems of the physicians in the private practice of medicine. Also, of course, the physicians in the private practice of medicine must become more knowledgeable and more concerned with the problems facing hospitals in the delivery of health care. The development of a true "partnership" can accomplish this.

M.T. Mustian, President
Tallahassee Memorial Regional Medical Center, Tallahassee

Editor's Note: Mr. M.T. Mustian, the president of the 700-bed Tallahassee Memorial Regional Medical Center, has a long and distinguished career in hospital administration which has resulted in many prestigious honors and appointments.

Reprinted with permission from *The Journal of the Florida Academy of Family Physicians*, Fall 1983, Vol. XXXIII, No. 4.

The enemy is us

A recent *Wall Street Journal* carried a long article on the continuing physician malpractice crisis. It quoted a Miami orthopedic surgeon as saying that there are no longer patients, only "adversaries". I wonder how many physicians feel as he does.

People come to us because they are in distress. Since we have spent years teaching them how wonderful modern medical science is, they expect us to be able to take care of all their problems. Only now are we realizing that we have built up their expectations beyond our abilities to deliver. Now we are trying to re-educate patients to understand our limitations. Very few doctors (Thank God!!) still believe the patient doesn't need to know anything about his illness.

Most of us are trying to give the patient more of a role in determining his treatment, feeling that the risk of lawsuit is lessened by increased dialog. The responsibility for treatment is now being shared between doctor and patient whenever possible.

I hope the majority of us are still motivated by care for other human beings, and not by how much we stand to gain or lose by taking the next case that comes through the door. We are frustrated by the insurance system which is largely responsible for the high cost of medical care today. We are more frustrated by the litigation system in this country which assumes that if the outcome of a treatment is less than perfect, someone must be to blame. We are frightened by the trial lawyers' view of life that recompense should automatically follow from any patient dissatisfaction (real or imagined), and that the guiltiest individual is the one with the "deepest pocket" (real or imagined). We certainly do not feel, as has been represented, that bad treatment should go unpunished. We just want people to realize there is a difference between bad treatment and imperfect outcome from good treatment.

Most of us, in short, are trying to be good doctors. If we begin looking at every patient as an "adversary", how can we possibly continue to provide medical care to anyone? How can we claim any objectivity in deciding therapy? If patients were really adversaries, the only sane course would be to lock our doors and hope they all go away.

I hope the readers of the *Wall Street Journal* understand that the Miami orthopedist does not speak for the majority of physicians.

John E. Perchalski, M.D.

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CORRESPONDENCE

Dear Editor: Although the article by Sherman and Loughlin (J. Florida M.A., September 1983) entitled, "The Dilemma of SIDS" contains an informative review of the "near miss" cases, if fails to define and, indeed, overlooks the dilemma faced by medical examiners investigating sudden infant deaths.

The authors statement that "in the late 19th Century . . . parents were held responsible for their children's death" implies that no cases of "SIDS" today can be attributed to homicidal child abuse. This is simply not true. Experienced medical examiners know that it may be difficult or impossible to differentiate smothering of an infant from a true SIDS even with a careful and complete autopsy. Christine Falling made that clear to those who were previously unconvinced.

A careful investigation of the death scene as well as the family relationships and social background is essential in all potential SIDS deaths. With the awareness by most law enforcement officers today of the necessity for a considerate, sympathetic and tactful approach to the bereaved family, and the rapid communication of the diagnosis of SIDS to the family by the medical examiner, a minimum of added trauma will occur, while still protecting the public interest.

The authors recommendation that an autopsy "should be available for all infants" is supported by Florida Statute 406 which authorizes the medical examiner to investigate all cases of sudden and unexpected death. The Rules and Regulations of Florida's Medical Examiners Commission states that "a complete autopsy *shall* be performed when the death . . . is suspected to be as a result of Sudden Infant Death Syndrome."

The authors further recommendation that the "autopsy . . . must be interpreted appropriately by pathologists who feel comfortable in diagnosing children as having died of SIDS" should have an added caveat: ". . . providing everything possible has been done to exclude homicide." We should not feel "comfortable" with the diagnosis of SIDS without a thorough investigation.

Wallace M. Graves Jr., M.D.
Ft. Myers

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Meetings

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JANUARY 1984

Oral Pathology Review Histology, Differenctial Diagnosis and Management, January 9-13, University of Miami. For info.: Division of CME D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101, (305) 547-6716.

Clinical Cardiac Diagnosis, January 13-15, Sheraton Sand Key Resort, Clearwater. For information: Henry Marriott, M.D., St. Anthony's Hospital, 601 12th Street North, St. Petersburg 33705, (813) 894-0790.

16th Annual Postgraduate Seminar: Pediatric and Adult Urology, January 18-21, Bal Harbour. For info.: Charles M. Lynne, M.D., Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6630.

Hypertension in the Elderly, Jan. 19, Spartan Resort, Brooksville. For information: William Winter, M.D., Lykes Memorial Hospital, State Rd. 700, Brooksville 33512, (904) 796-5111.

Treatable Life Threatening Cardio-Pulmonary Episodes, Jan. 20-21, Diplomat Hotel, Hollywood. For info.: Marvin L. Meitus, M.D., 4300 Alton Rd., Miami Beach 33140, (305) 674-2121.

Continuing Education in Pediatrics, Jan. 22-26, Diplomat Hotel, Hollywood. For info.: Donald H. Altman, M.D., 6125 SW 31st Street, Miami 33155, (305) 666-6511.

9th Annual Review and Practical Advances in Pathology, Jan. 23-27, Bal Harbour. For info.: Marie V. Ides-Dapena, University of Miami, P. O. Box 016960, Miami 33101, (305) 325-6437.

Tutorial Course in Instruction in Coronary Care for the Practicing Physician, Jan. 23-28, Univ. of Miami. For information: Michelle Enriquez, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6245.

Swan-Ganz Monitoring in the Non-Cardiac Surgical Patient, January 26, North Broward Medical Center, Pompano Beach. For information: Steven Valenstein, M.D., 1800 N. Federal Highway, Pompano Bch. 33062, (305) 941-0993.

Controversies in Rehabilitation for Neurological Trauma and Disease, January 26-29, Sheraton Bal Harbour, Bal Harbour. For information: Division of CME D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101.

6th Annual Walt Disney World Pulmonary Wintercourse, Jan. 26-29, Hotel Royal Plaza, Lake Buena Vista. For information: Milton S. Braunstein, M.D., 5526 Arlington Road, Jacksonville 32211, (904) 743-2933.

Round Table Day, January 27, Diplomat Hotel, Hollywood. For info.: Donald H. Altman, M.D., 6125 SW 31st Street, Miami 33155, (305) 666-6511.

Farrior Ear Surgery Course, Jan. 28 - Feb. 2, Holiday Inn Central, Tampa. For info.: J.B. Farrior, M.D., 509 Bay Street at Bayshore, Tampa 33606, (813) 253-0916.

Oculoplastic Symposium 1984, Jan. 28 - Feb. 4, United States Virgin Islands. For info.: Lawrence Katzen, M.D., 2889 Tenth Ave. North, Lake Worth 33461, (305) 964-0707.

Pediatric Nephrology Seminar XI: Neonatal Kidney & Fluid/Electrolytes II, Jan. 29 - Feb. 2, Bal Harbour. For information: Pearly Seidler, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 325-6726.

Digital Radiography 1984, Jan. 30 - Feb. 3, Diplomat Hotel, Hollywood. For info.: Educational Symposia, P.O. Box 17241, Tampa 33682, (813) 971-6000.

FEBRUARY

Breast Disease Update (II), February 1-5, Hilton at Walt Disney World Village, Lake Buena Vista. For information: Lourdes S. Fuentes, 4300 Alton Rd., Miami Bch. 33140, (305) 674-2424.

Family Practice Weekend — University of Florida, Feb. 3-5, Hilton Hotel, Gainesville. For information: William Stewart, M.D., 4057 Carmichael Ave., #229, Jacksonville 32207, (904) 392-4321.

Second Annual Interventional Neuroradiology Seminar, Feb. 5-8, Walt Disney World Village Plaza, Lake Buena Vista. For info.: Charleen Krissman, 12901 North 30th Street, Tampa 33612, (813) 974-2538.

Internal Medicine 1984, Feb. 5-10, Sheraton Bal Harbour. For information: Jose Bocles, M.D., Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6063.

Psychiatric Perspectives 1984, Feb. 9-11, Americana Dutch Resort Hotel, Lake Buena Vista. For information: Irving Kolin, M.D., 1502 Lucerne Terrace, Orlando 32806, (305) 843-5333.

3rd Symposium on Burn Care, Feb. 10-11, Sheraton World, Orlando. For information: Hal C. Bingham, M.D., Box J-233, JHMHC, Gainesville 32610, (904) 392-3711.

Advanced Cardiovascular Diagnostic, Therapeutic, Rehabilitation and Patient Follow-up Methods with an Introduction to the Role of the Multipurpose Computer in the Medical Practice Setting, Feb. 10-12, Sheraton Yankee Trader, Ft. Lauderdale. For information: 64 Inverness Drive East, Englewood, CO 80112, Toll free: 800-525-8651 or (303) 790-8445.

Florida Midwinter Seminar in Ophthalmology, Feb. 13-15, Lake Buena Vista. For information: Gaby Kressly, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 326-6099.

Tutorial Course of Instruction in Coronary Care for the Practicing Physician, Feb. 13-18, Univ. of Miami. For information: Michelle Enriquez, University of Miami, P.O. Box 016960, Miami 33101, (305) 547-6245.

Florida Midwinter Seminar in Otolaryngology, Feb. 16-18, Lake Buena Vista. For info.: Gaby Kressly, Univ. of Miami, P.O. Box 016960, Miami 33101 (305) 326-6099.

Vail Symposium on Intensive Care, Feb. 18-25, Vail, Co. For info.: Sonja Craythorne, Univ. of Miami, P.O. Box 016960, Miami 33101, (305) 547-6411.

Winter Conference on Principles of Practice Management, Feb. 18-25, Vail, CO. For info.: Sonja Craythorne, University of Miami, P.O. Box 016960, Miami 33101, (305) 547-6411.

Symposium on Parkinson Disease, Feb. 20-21, Miami Beach. For information: D. Ram Ayyar, M.D., University of Miami, P.O. Box 016960, Miami 33101, (305) 547-6732.

Conference on the Beach, Feb. 20-25, Daytona Hilton, Daytona. For info.: Richard Dodd, M.D., Post Office Box 1990, Daytona Beach 32015, (904) 258-1584.

Neurological Update 1984, Feb. 22-24, Univ. of Miami, Miami Beach. For information: D. Ram Ayyar, M.D., Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6732.

Pediatric Dermatology Seminar XI, Feb. 23-26, Doral Beach Hotel, Miami Beach. For information: Guinter Kahn, M.D., 16800 NW 2nd Avenue, N. Miami Bch. 33169, (305) 652-8600.

Midwinter Seminar in Obstetrics and Gynecology IX, Feb. 23-25, Hyatt Regency, Tampa. For information: J.M. Ingram, M.D., Univ. of South Florida, Box 18, Tampa 33612, (813) 974-2088.

MARCH

Second Annual Clinical Management of the Elderly Patient for the Practicing Physician,

March 1-3, Americana Dutch Inn, Orlando. For information: L. Gregory Pawlson, M.D., (202) 676-4269.

Dedication Ceremony and Symposium — Regional Oncology Center, March 2 & 3, Hilton Hotel, Daytona Beach. For information: H. Kerman, M.D., 570 Memorial Circle, Ormond Beach, (904) 672-1852.

10th Annual Conference in Anesthesiology: Special Ten Year Anniversary Conference, March 3-10, Vail, CO. For information: Sonja Craythorne, Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6411.

Mediclinics Postgraduate Medical Refresher Course, March 5-16, Galt Ocean Mile Hotel, Ft. Lauderdale. For info.: Donald Lannin, M.D., 2917 S. Ocean Blvd., Suite 905, Highland Beach 33431, (305) 272-8973.

16th Annual Teaching Conference in Clinical Cardiology, March 7-10, Sheraton Bal Harbour, Bal Harbour. For info.: Michael S. Gordon, M.D., Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6491.

ECG Interpretation, Arrhythmia Management, Cardiac Rehabilitation and the Role of the Multi-purpose Computer in the Medical Practice Setting, March 9-11, Don Cesar, St. Petersburg. For information: 64 Inverness Dr. East, Englewood, CO 80112, Toll free: 800-525-8651 or (303) 790-8445 Ext. 123.

Advances and Improvements in Hernia Surgery, March 15-17, Doral Beach Hotel, Miami Bch. For information: Arthur Gilberg, M.D., 6615 Miami Lakes Drive, East, Miami Lakes 33014, (305) 624-7081.

Current Trends in Orthopedics, 1984, March 21-23, University of South Florida. For info.: Ms. Debbie Smelt, USF Dept. of Orthopedic Surgery, 12901 N. 30th Street, Box 36, Tampa 33612, (813) 974-3322.

Current Problems in Poisoning, March 22-24, Hyatt Orlando. For info.: James Hillman, M.D., P.O. Box 18566, Tampa 33679, (813) 251-6911.

15th Annual Topics in Internal Medicine, March 22-24, Gainesville Hilton. For info.: A. Jay Block, M.D., Box J-233, JHMHC, Gainesville 32610, (904) 392-3143.

Pan American Symposium on Septal Rhinoplasty, March 23-24, Univ. of Miami. For information: Gloria Allington, Univ. of Miami, Post Office Box 016960, Miami 33101, (305) 547-6716.

Practical Aspects of Newer Cardiovascular Renal Drugs, March 26-29, Orlando Hyatt Regency, Lake Buena Vista. For information: University of Miami, CME Dept., P.O. Box 016960, Miami 33101, (305) 547-6716.

Problems in Rheumatology, March 28-31, Don Cesar Bch. Resort Hotel, St. Petersburg. For info.: Bernard Bermain, M.D., 12901 N. 30th Street, Box 19, Tampa 33612, (813) 874-2681.

Interesting Topics in Orthopedics, March 29-31, Royce Hotel, Palm Beach. For info.: Michael Zeide, M.D., 7820 Edgewater Dr., W. Palm Bch. 33406, (305) 433-0797.

APRIL

Practical Cardiology for the Family Physician, April 2-4, Sheraton World, Orlando. For information: Robert Eliot, M.D., Univ. of Nebraska, 42 and Dewey Ave., Omaha, NE 68105, (305) 897-1514.

Tampa Bay Cardiovascular Seminar, April 6-7, Hyatt Regency Hotel, Tampa. For info.: Dixon Smith, P.O. Box 4835, Tampa 33677, (813) 253-0023.

Advanced Cardiac Life Support, April 6-8, Pasco -- Hernando Community College, New Port Richey. For info.: James M. Marlowe, M.D., P.O. Box 1058, New Port Richey 34291-1058, (813) 842-9574.

ECG Interpretation, Arrhythmia Management, Cardiac Rehabilitation and the Role of the Multi-purpose Computer in the Medical Practice Setting, April 6-8, Sheraton World, Orlando. For information: 64 Inverness Dr. E., Englewood, CO 80112, Toll free: 800-525-8651 or (303) 790-8445 Ext. 123.

Issues and Advances in Pediatrics, April 10-13, Holiday Inn Surfside, Clearwater. For information: Dr. Frank Cozzetto, Univ. of S. Florida, 12901 N. 30 Street, Tampa 33612, (813) 974-4296.

14th Annual Radiation Therapy Clinical Research Seminar, April 12-14, Hilton Hotel, Gainesville. For information: Wm. Mendenhall, M.D., Box J-385, JHMHC, Gainesville 32610, (904) 392-3162.

Flexible Endoscopy Workshop, April 13, Hyatt Regency Hotel, Tampa. For info.: Harold L. Ishler, M.D., 4057 Carmichael Ave., Suite 229, Jacksonville 32207, (813) 441-4979.

Family Practice Weekend, Univ. of S. Florida, April 13-15, Hyatt Regency Hotel, Tampa. For information: Harold L. Ishler, M.D., 4057 Carmichael Ave., #229, Jacksonville 32207, (904) 441-4979.

Spring 1984 Family Practice Review, April 16-20, Hyatt Orlando, Kissimmee. For information: Lamar Crevasse, M.D., Box J-233, JHMHC, Gainesville 32610, (904) 392-3143.

Stress and the Hot Reactor: Is It Worth Dying For? April 16-18, Buena Vista Palace Hotel, Orlando. For info.: Robert Eliot, M.D., Florida Heart Institute, 500 E. Rollins, Suite 101, Orlando 32803, (305) 897-1575.

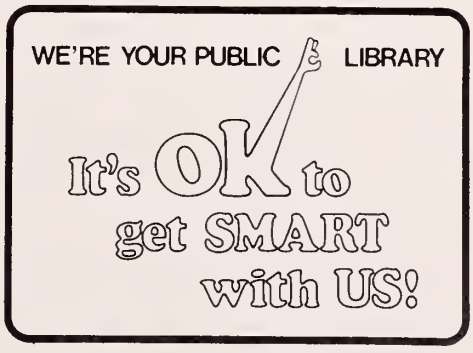
May

Cardiology in the Nuclear Age, 1984, May 16-18, Sheraton World Hotel, Orlando. For information: Rick Mace, 500 E. Rollins, Suite 101, Orlando 32803, (305) 897-1575.

Teen Sex: A Medical, Psychological & Educational Dilemna, May 19, Royce Hotel, W. Palm Beach. For information: Jay Trabin, M.D., 1897 Palm Bch. Lakes Blvd., Suite 213, West Palm Beach 33409, (305) 689-8780.

June

5th Annual Child Neurology Post-Graduate Course, June 5-9, Sonseta Beach Hotel. For information: Robert Cullen, M.D., Miami Children's Hospital, 6125 SW 31 Street, Miami 33155, (305) 666-6511 Ext. 421.



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Manuscripts should be submitted to Daniel B. Nunn, M.D., Editor of *The Journal*, Florida Medical Association, Post Office Box 2411, Jacksonville, Florida 32203, in original and three duplicate copies. Copies should be typewritten and double spaced.

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Title should be short, specific, clear and amenable to indexing.

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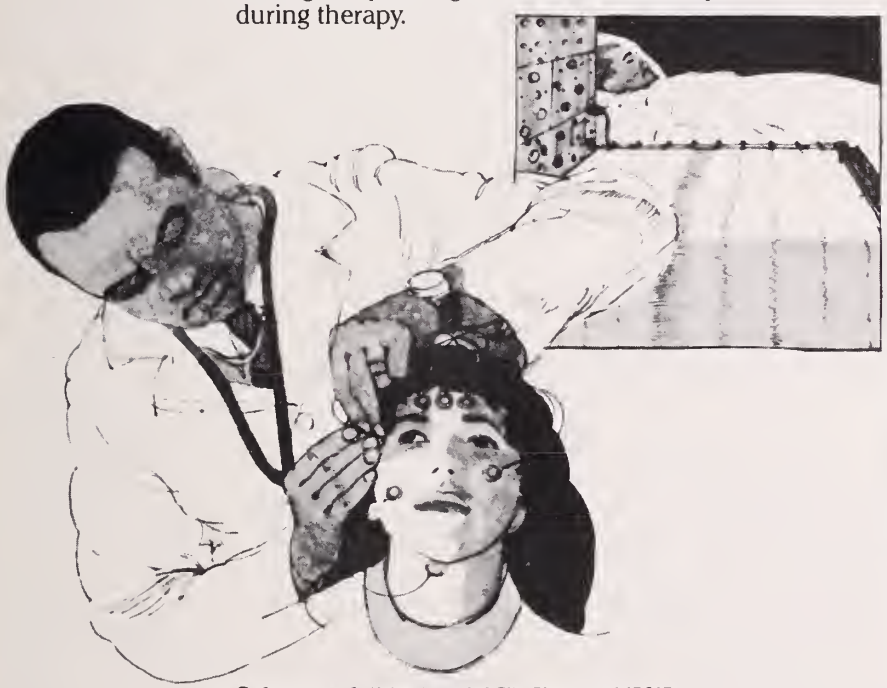
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References: 1. Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **4.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **5.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Kales JD: *Pharmacol Physicians 4*:1-6, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*:25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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